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ABSTRACT

The purpose of this study is to describe and analyze for American readers the Chinese high school in Taiwan today, both its historical-philosophical context and its current operational framework. Part 1 of the study, "The Social, Historical, and Cultural Provenance of the Modern Chinese High School in Taiwan," covers methods and models, a history of modern Taiwan, Taiwan's place in Chinese educational history, Taiwan's educational system under the Japanese, Sun Yat-sen's SAN MIN CHU-YI and educational development, John Dewey's influence on Chinese pedagogy, the traditional Chinese examination system, the influence of Confucius, the childhood experience in Taiwan, the growth of literacy, and education as a change agent. Part 2, "Contemporary Issues and the Chinese High School in Taiwan," focuses on the high school, a historical look at Chinese tertiary education, educational reform, the middle school, curriculum and the academic high school, discipline and parental involvement, moral education, teaching methodology for the high school, extracurricular activities, educational expenditures, faculty, facilities, entrance examinations, a statistical analysis of the high schools, a case study, and a review of criticisms, concerns, appraisal and assessment. A five-page bibliography and a list of persons interviewed for the study are appended. (JH)

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LESSONS FROM AFAR:
THE CHINESE HIGH SCHOOL
IN MODERN TAIWAN
AND OTHER ESSAYS

By

Douglas C. Smith

West Virginia University

U.S. DEPARTMENT OF EDUCATION
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Dr. Jeanne Tchong Koei Li, President

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LESSONS FROM AFAR: THE CHINESE HIGH SCHOOL IN MODERN TAIWAN

AND OTHER ESSAYS

This book is dedicated
to my mother and also
to George Curtis Engel

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太平洋文化基金會

PACIFIC CULTURAL FOUNDATION

FOREWORD

It is a great pleasure to recommend this book, LESSONS FROM AFAR: THE CHINESE HIGH SCHOOL IN MODERN TAIWAN, by Dr. Douglas C. Smith. Coordinator at the West Virginia University Graduate Center at Shepherd College, Dr. Smith is a good friend of the Pacific Cultural Foundation. Our foundation has assisted in the publication of several of his books, including HIGHER EDUCATION IN TAIWAN: THE CONFUCIUS-DEWEY SYNTHESIS, AN ISLAND OF LEARNING: ACADEMEOCRACY IN TAIWAN, and IN THE IMAGE OF CONFUCIUS. Through our grant programs, Dr. Smith has made lots of friends among scholars and professors in the Republic of China. We are pleased to be such an intermediary and encourage people who are interested in Chinese studies to be our Fellows.

In September 1984, Dr. Smith took his most recent trip to the Republic of China for his research on the high school in Taiwan. The result is the publication of this book.

We sincerely hope that this book will not only help people better understand the present high school educational situation in the Republic of China but will also draw responses and kind comments from the general public.

Jeanne Tchong Koei Li
President
Pacific Cultural Foundation

ACKNOWLEDGMENTS

I have attempted (for the most part consciously) to produce a study in a manner that is consistent with the philosophy which underlies its discussion of the relationship among peoples and societies.

In this effort, I was assisted by a number of talented people. This book received unusual care and attention from Grace Henderson, who is my colleague at the West Virginia University Graduate Center in Shepherdstown. Mrs. Henderson's efforts on behalf of this project were herculean, and I am honored to thank her at this time.

Also assisting me with early drafts of this study were Dr. John Andes, Professor/Dean of Education; Dr. Edsel Gainer, Director of Off-Campus Graduate Programs; Dr. Jack L. Hammersmith, Professor of Asian Study; and Mrs. Carol Elliott. All of these individuals are on the West Virginia University faculty or staff.

Jewel L. Vaughan, who has helped me with my other projects on Chinese education, showed her usual intelligence and care in reading the first manuscript draft; and Dr. Bruce Clayton Flack, Vice President of Glenville State College, made numerous valuable suggestions on ways to improve this book.

I am indebted, also, to the Screening Committee of the Pacific Cultural Foundation for selecting this study for funding and publication. A special note of thanks is extended to Dr. Jeanne Tchong-Koei Li, President of the Pacific Cultural Foundation, for her constant support of my endeavors and to Mrs. Cathy Wang and Mr. David Chao for their logistical help while I was in the Orient. As in the past, I wish to express my deepest appreciation to Mr. Gary James and his fine organization for assisting with the development and finalization of this book.

My visit to Taiwan in 1984 was made most rewarding, however, by the opportunity to live with a Chinese-Taiwanese family. Mr. and Mrs. Johnson S. Uang of Taipei afforded me the opportunity to be part of their family, to live in their lovely home in the foothills that surround Taipei City, and to interact with the cultural and social life that makes Taiwan the citadel of Chinese history and elegance.

Douglas C. Smith
Shepherdstown, West Virginia

Spring, 1986

INTRODUCTION

The process of education is necessarily an aspect of the larger social process of communication among humankind. It is the purpose of this study to describe and analyze for the American reader the Chinese high school in Taiwan today.

This book is, in many ways, of the same breed as my earlier ones: THE CONFUCIUS-DEWEY SYNTHESIS, AN ISLAND OF LEARNING, and IN THE IMAGE OF CONFUCIUS. Unlike them, however, this work will focus directly and indirectly on the high school in Taiwan, both its historical-philosophical context and its current operational framework. To this purpose, it turns the focus upon lessons that may be learned from a distant land and a dissimilar social system.

In 1959 James B. Conant published his important book THE AMERICAN HIGH SCHOOL TODAY, which suggested the high school should attempt to be all things to all people and, at the same time, to strengthen its curriculum in mathematics, the sciences, and foreign languages. A decade ago the famous COLEMAN REPORT, written by James S. Coleman of the University of Chicago, suggested that the formal, state-run educative process had little bearing on intellectual development and social acculturation. A NATION AT RISK: THE IMPERATIVE FOR EDUCATIONAL REFORM, which was published in 1982, is perhaps the most forthright statement available about the status of public education in America. This report suggests that American education at all levels is in a dangerous state of disrepair. The year 1983 saw the publication of Ernest L. Boyer's (Editor) HIGH SCHOOL: A REPORT ON SECONDARY EDUCATION IN AMERICA. Though this study attempts to present an optimistic view (compared to A NATION AT RISK) of the future of the American high school, the essence of HIGH SCHOOL (1983) is that our secondary school system is in a state of shambles. The

lengthy list of recommendations gives evidence to this fact, as do the implications found in the text of the publication.

None of the major and highly funded studies that have received wide coverage in the mass consumption media have suggested that American educational leaders look to other nations--to those which have highly successful school systems--for answers to American educational problems.

It is my hope that this exiguous effort on my part, LESSONS FROM AFAR, will be of value as a vehicle for further evaluating and improving America's high schools and, at the same time, promote cross-cultural understanding between two societies, Taiwan and America.

The book is divided into two parts: I. "The Social, Historical, and Cultural Provenance of the Modern Chinese High School in Taiwan" and II. "The Contemporary Setting and the Chinese High School in Taiwan." Each part is then divided into sections. A bibliography is found at the end of the study; and, when relevant, footnotes conforming to the publisher's requirement for style have been included.

Narrative, description, analysis, and appraisal are found in both Part I and Part II of this essay, which has as its theme the Taiwan high school but on numerous occasions does digress into areas of general education and Chinese philosophy and life that are tangential to this main topic.

The concluding section that deals with criticisms and concerns facing Taiwan's high school educational system was added as a postscript to the original manuscript and is based on the writing and research of Chinese and Western scholars who currently are part of Taiwan's education system.

PART I

THE SOCIAL, HISTORICAL, AND CULTURAL PROVENANCE

of the

MODERN CHINESE HIGH SCHOOL IN TAIWAN

1. LESSONS FROM AFAR: CHALLENGES FROM AFAR

THE CHINESE HIGH SCHOOL IN MODERN TAIWAN

There are places in this world of ours destined by their history, their beauty, their populace, and their locations to stir the intellect and emotions of man. Shrouded in mystique and blessed with an elan vital, these few places bring delight to the foreign visitor. These rare locations are essentially different in their essence from other places where one travels; to the traveler far from home they become a sanctuary, special and therefore wonderful. Ideally these extant and distant places that dot the planet Earth are unique.

The small island off the coast of the Asian mainland known to the world as Taiwan is such a place. Unique yet civilized; developed yet with thousands of years of history to its credit; modern yet profoundly reverent for the distant and recent past; serene yet prepared to stave off any difficulties that confront it; filled with energetic youthful impatience yet respectful to its old and its leadership--all of these create such a place as Taiwan.

Perhaps the person who best captured the spirit of Far Formosa was George Leslie MacKay who, in the 1880's and 1890's, was a missionary in Taiwan. McKay begins his delightful FROM FAR FORMOSA, accounting his years on island China, with these words:

> Far Formosa is dear to my heart. On that island the best of my years have been spent. There the interest of my life has been centered. I love to look up to its lofty peaks, down into its yawning chasms, and away out on its surging sea. . . .There I hope to spend what remains of my life, and when my day of service is over I should like to find a resting-place within the sound of its surf and under the shade of its waving bamboo.

While I was preparing my materials and research notes for this essay on high school education in modern Taiwan, I began to think of what a society's educational system reveals to us about that society.

Social scientists, philosophers, and political pundits are often seeking indicators of nations' strengths. The normal measuring devices are the gross national product, the annual income of families, life expectancy, the average number of household utilities, military potential, ad infinitum. I propose a different criteria to measure the vitality of a society and it is the investment made in the educational system. By investment, I do not mean only money. I suggest that a nation which is concerned with the quality of its future must have a strong, comprehensive, egalitarian, and public educational system. Education is one of the few areas of national investment in which there is no immediate return. Yet history has shown that a linkage does exist between a society's educational process and the future-orientedness of that society. And the more future-oriented a nation is, the greater the likelihood that the economic, social, and political difficulties that befall all nations will be resolved in a way compatible with the best interest of the peoples of that society. While some nations can claim to have great land mass and, as a consequence, large natural resources, and other nations can use their GNP to show their strength, few societies can indicate better than Taiwan its concern for its future. This is best illustrated by the educational system that now exists in Formosa, which has as its goal developing youth to their fullest potential to anticipate the needs and demands of that society.

If we could use one single measuring device to determine the vividity of a society, I think education might be appropriate. If we did use education, Taiwan would by all qualitative standards be one land that would rank in the small group of nations that hold the leadership positions in the world.

Indifference to schools and their value to a society as vehicles for intellectual and social growth may betoken a more general anti-intellectualism in the nation's leadership and populace; rigid and authoritarian classroom

settings and teaching methods may suggest an authoritarian governmental arrangement; poor use of school-dedicated resources may be an extension of the inability of government, business, agriculture, and military to use effectively the resources at their disposal; and, if schools do not emphasize the past heritage of a civilization and show its relationship to the future, it is perhaps true that a nation has lost its idealism and has moved into the area of those societies that are plagued with predestination and fatalism.

There is inherent in the educative system of all advanced civilizations a dichotomy in aims and methods which reflects two conflicting demands found in all developing and highly developed societies. On the one hand, society to survive and prosper requires a certain degree of conformity in order to maintain law and order. On the other side, in order to advance and make innovations, it needs the kind of originality in technological and cultural matters which often goes hand-in-hand with nonconformist thought and actions. The educational system of a nation will usually lay more stress on conformity than on originality. In practice, the ideal balance between the two is difficult to achieve (P. A. Herbert, 1982).

The Chinese high school in modern Taiwan does emphasize conformity of student behavior, learning, and social and cultural activities. This is done for two predominant reasons: (1) All children who go to the academic high school may sit for the national college entrance examination and must have the same knowledge as their peers in order to be competitive; and (2) the educational authorities with whom this writer spoke suggested that conformity in the childhood learning process and creativity in later life are related. As one scholar suggested, "How can one hope to be a great musician, or artist, or physician if he has not studied hard and learned from rote the basics of these art forms?"

Education in the United States today is confronted with numerous problems. Over the last few years we have experienced in America a flurry of books, articles, and reports on the dilemmas that are being faced in American public education. Commissions, foundations, and individuals have targeted different areas of American education and have let fly a volley of concerns. Virtually all of the critics of American public education are correct in their negative assessment. The schools in the U. S. are not doing as good a job as would be suggested by the monies spent on education, the level of education, expertise, and professionalism of teachers and administrators, the quality of the facilities and the resources available in said facilities, and the traditions of the United States.

Perhaps the weakest link in the traditional educational continuum is the American high school. For most it is the tertiary level of formal education, for others it is the final preparation that prefigures college, and for a small group of students it is the phase in their schooling that brings about emotional and psychological turmoil. Violence in the high schools of our nation is a near endemic problem: Teachers are willing to make "the deal" with students--"If you give me no discipline problems, I will pass you; don't worry about studying, just don't cause me problems." Also, because of the nature of the teenage personality, the difficulties of social and emotional dislocation, alienation, and the rampant search for immediate gratification that our society faces in general are magnified at the high school level (Sykes, 1984, pp. 59-90).

It is not in the purview of this essay to trace the historical evolution of the American high school, nor is it possible to discern the key factors that have created the problems that are faced. Suffice it to say that America must reestablish the high school education to its former place of

importance as an institution for formal education, for preparation for life and college, and for training children to become part of the world of business, industry, commerce, and recreation.

After reading the literature available on the American high school, one finds that in general there is no consensus on why we have the difficulties in our high school educative program.

This study represents another vehicle for investigating education, particularly the high school. I have chosen to write on the modern Chinese high school in Taiwan for a number of reasons: Chinese culture is the oldest continuing civilization in the world; education in modern Taiwan is quite different from the system we have in America, yet it has as its goals certain fundamentals that are essentially the same as we find in America, foremost of which is educating older and younger students so that they can find gainful employment and can fulfill their personal quest for education and learning and self-actualization to their fullest capacities.

At variance with the United States on means yet quite the same on goals, Taiwan appeared to be an ideal location to prepare a treatise, for academics and the general reader alike, on comparative high school education.

Further recent evidence suggests that American society can learn from Taiwan's educational experience.

A recently completed research study, orchestrated by Dr. Harold W. Stevenson of the Center for Human Growth and Development at the University of Michigan and supported by the National Institute of Mental Health, helps shed light on the variance that exists between the educational outcomes in the United States and those in modern Taiwan (Edward B. Fiske, 1984, pp. 1-30). The theses of Stevenson's soon to be published findings are that the academic

achievement of American school children, grades 1 through 12, lags behind that of similar aged children in Taiwan.

The University of Michigan research was based on testing and observations of 1,440 children. The results showed that in all subjects that could be tested with bias-free examinations American children did less well than their Chinese counterparts. Part of the conclusion reached by Stevenson and his colleagues was that young people in America do less homework after and before school, are in class on a less regular basis, and while in the school setting are more likely to be engaged in "academically irrelevant" pursuits, such as whispering to classmates and roaming unmonitored through the school.

Even with lower achievement and greater abuse of school time, mothers of United States students were shown to be more satisfied with the school environment and learning outcomes than the mothers of Taiwan. As Stevenson states, "Our national problem lies not only in American schools but in American homes. The average American family does not take the responsibility to provide the informal introduction to reading and mathematics that you find in other countries."

The study indicates clearly that there is no evidence that Oriental children are inherently smarter than Occidental youngsters. It even notes that the American child begins his education with certain keen advantages over his Chinese counterpart, mainly that over 50 percent of the parents of the American children had at least some college education compared to 13 percent in Taiwan.

One of the conclusions that the Stevenson group reached after analyzing its data was that American schools are less effective in the management of instruction than the schools of Formosa. The average school day is longer in Taiwan and, while most American pupils will attend class for 180 calendar

days, the Taiwan child will be in school for about 240. The time is better used in the Taiwan model also. The Chinese youths use about 50 percent more of their school day in academically oriented activities. Discipline is also an issue addressed by the Stevenson report. Class disruptions that hamper the process of learning are more likely to occur in the American schools than in those of Taiwan. Irrelevant questions, whispering, fighting, and wandering through the building are all incidents cited in the report.

Parents play a major role in their child's attitude toward the school setting. Chinese mothers, for instance, read to their children more often than American mothers and also involve their young in games that are educational in nature. Television is more restricted in the Taiwan family than in the American home, Stevenson notes.

The average fifth grade Chinese does about 114 minutes of homework a day compared to his American counterpart who does 46 minutes. The researchers also discovered cultural differences that could affect performance. Asked what is the "most important factor in determining a child's performance in school," mothers on Taiwan gave highest rating to "effort"; American mothers were more likely to cite "natural ability." Chinese mothers also were more likely to believe that if their children did not do well in a class or on an examination it was probably due to laziness or that they did not try hard enough; American mothers would often cite the school for not preparing the children well for the challenge.

Stevenson also pointed to the "interesting paradox that Americans not only achieve at a lower level but seem content with what they are doing." Ninety-one percent of American mothers judged their children's schools to be doing "a good or excellent job," while only 42 percent of the Taiwanese mothers were satisfied. Stevenson concludes that "there is little indication

from our data that American parents are sufficiently dissatisfied with the education their children are getting to alter their attitudes and bring about needed educational reform."

2. SOME THOUGHTS ON METHODS, MODELS, AND LIMITATIONS

Numerous models for better understanding the strengths and weaknesses of American education have been developed. This essay will have as its focus the Chinese high school in modern Taiwan. Empirical comparisons between the Chinese high school and the American high school will not be drawn. Most who read this study will have a good understanding of the school system in America and will, therefore, be able to make judgments and comparisons by themselves.

It is the primary purpose of this piece of writing to help scholars and educationalists and concerned parents in the United States comprehend better another quite different nation's high school paradigm--the high school in Taiwan--and, as a consequence, bridge the gap that separates American society from that of Taiwan. Only by cultivating throughout our society a tradition of rich understanding, empathy, and knowledge of other societies with which we share this planet can we hope to avoid the cataclysmic problems that result from ethnocentrism, blind nationalism, and their logical outcome--war.

J. R. Kidd suggests that comparative education has numerous goals. Foremost is to become better informed about some area of education in another part of the world. Perhaps, though, the true ideals of comparative educational research are to allow the researcher and reader to deepen their understanding of their own education and society and to reveal how cultural biases

and personal attributes affect their judgment about possible ways of carrying on learning transactions (Kidd, 1981, p. 202).

One important objective for comparative educationalists is to distinguish those unique characteristics or patterns of behavior that are culture-bound, related to a given civilization, nation, society, or group from those that may have universal characteristics of applicabilities. At its best, comparative studies of education programs and institutions can help one society better understand its own past, locate its place in the world of scholarship, and discern more clearly what the educational picture of a society may be.

Properly conceived, comparative education uses the tools of anthropology, sociology, history, and the devices available in education research and measurement.

A number of vehicles are available to the researcher in developing modalities for inquiry. The most popular approach is that which describes in detail another society's education system. Observation, assimilation, and reporting are the key ingredients to this method.

By portraying another society's education paragon accurately and with sensitivity, it quite often becomes apparent that the problems one nation felt were uniquely hers are in fact pandemic. An example is the problem that America now faces in enlisting the best and brightest college students to become part of the teacher corps. Recent travels by this writer suggest that this "crisis" is also found in Japan, Thailand, Formosa, Hong Kong, and Korea. The literature on the subject indicates that nations as disparate as Russia and South Africa are also confronted with this issue, which appears to have its roots in the public's and government's perception of teachers and the resulting salary paid for educators. An understanding of educational

difficulties that face cognate situations abroad helps mitigate the rancor that periodically emerges on the domestic front (Noah, 1984, pp. 551-553).

Many of the recent studies that malign American education compare students of different countries. Addressing the problems of American education by pointing out how much more successful other countries are can have mixed results. On the positive side, it can help this nation adopt techniques that are tried and proven and, when possible, anticipate the same affirmative results. It is a generalization--but probably a correct one--to suggest that it is almost impossible to "adopt or transplant" another nation's educational system and implant it in an alien society. Educational systems are a little like languages: It is quite difficult to develop a language; rather, like education, language must evolve in accordance with the historical development and cultural variances of a society.

Perhaps the main problem that can result from too heavy a reliance on information gained from comparative educational studies is the problem of ethnocentrism. This--in comparative education research--can be defined as looking at another society, nation, or hemisphere primarily from the viewpoint of the researcher's own culture and values (Kidd, 1981, pp. 218-240).

When researchers fall into the trap of projecting their own nation's concerns or their personal prejudices and values onto another society, what are perceived as "problems" in the educational system under study may only be "problems" in the society from which the researcher himself comes. American educators are quite often concerned with efforts by certain interest groups in this country and Canada to promote bilingualism. Articles appear regularly about the vast difficulties associated with one nation, two languages. Yet the educational literature of societies such as Russia, China, Singapore, Taiwan, Switzerland, and a host of other developed and developing nations

suggests that polyglotism is accepted and in some cases quite helpful in certain fields, particularly trade, commerce, and tourism.

Projecting what is seen as a problem often entails exporting indigenous concepts and using them in settings where their fit in reality may not be very good. Avoiding the ethnocentric syndrome becomes very difficult. As one becomes more educated, he spends more years in school in America; and his success is due, in large part, to the educational system that has given him the training and credentials to do field-based comparative education research. Yet the scholar who chooses this field for his academic endeavor must retain a certain sense of anationality and intellectual universality. Comparisons are valid and welcomed in cross-cultural research; yet they should be free of the natiocentrism and ethnocentrism that too often characterize the current scholarship in history, politics, and international affairs.

With all of the problems associated with comparative educational studies, this approach to evaluating one's own society and at the same time sharing with the academic community information on another society is the most desirable way to approach an understanding of education.

In his scholarly essay on comparative education, the late J. R. Kidd quite appropriately quotes President Julius Nyerere. It may be suggested that this quote can be a keen measurement by which those of us who write in comparative education can assertain the vitality of the society which we study and about which we write:

> Development has a purpose; that purpose is the intellectual liberation of Man. But Man can only liberate himself or develop himself. He cannot be liberated or developed by another. For Man makes himself. It is his ability to act deliberately, for a self-determined purpose, which distinguishes him from the other animals. The expansion of his own consciousness, and therefore of his power over himself, his environment, and his society,

> must therefore ultimately be what we mean by development. So development is for Man, by Man, and of Man. The same is true of education. Its purpose is the liberation of Man from the restraints and limitations of ignorance and dependency. Education has to increase men's physical and mental freedom--to increase their control over themselves, their own lives, and the environment in which they live. The ideas imparted by education, or released in the mind through education, should therefore be liberating ideas; the skills acquired by education should be liberating skills (Nyerere, 1978, in Kidd, 1981, p. 239).

Perhaps this is an appropriate time to review some of the limitations and constraints intrinsic in a comparative educational research project.

When an investigator does field research in another society, he must rely heavily on persons in positions of leadership and authority to assist him in his collection of data, developing an interview itinerary, and making the necessary logistical arrangements for a successful sojourn.

It is more than likely that the persons who are orchestrating the on-site activities have been successful in the educational and social system of the nation. Those persons interviewed are, as a rule, distinguished scholars and educators; their success has been due, in large part, to the educative, political, social, and economic systems about which they are being queried. The opportunities to meet with and interview men and women who have been unsuccessful in the society become problematic; they do not wish to come forth and discuss their personal failure, and the host coordinator would be hard pressed to request that these persons reveal their lack of success. Consequently, a certain bias is present in research that relies on interviews and data collection in a foreign society.

Language often presents a minor problem in overseas research projects. Though an American can usually develop a rudimentary knowledge of a foreign

language, developing the necessary understanding of subtleties of a second or third language, particularly an oriental language, becomes exceedingly difficult. A reliance on materials published in English and interviews with persons who speak English tends to dominate much of the field-based comparative education now being done.

Time is always a major factor when one is attempting to collect materials in a foreign society. Most scholars who travel to do field research are on rather strict time and financial schedules. Seldom will a person return to the United States without feeling that more could have been done and a larger sample of opinions and interviews solicited if there had only been more time and greater financial resources available.

Researchers who travel to distant lands are also confronted with the "consensus-temptation." Scholarship in this country and in most nations is written for three basic reasons: sharing of new ideas, monetary gains, and recognition and respect from peers. For one to develop an iconoclastic thesis--even if it is quite correct--could lead to subtle yet punitive results from colleagues and publishers. American scholarship, though often emphasizing its freedom, has built-in systematized and incremental deterrents to breaking from the continuance of traditional and anticipated conclusions.

Perhaps the most difficult issue that faces cross-cultural research is the tendency for an investigator to project his values and biases in his research. The educational system in which one is trained is always the model against which all other educational systems must be judged. Only by recognizing that each educational system has its own history and evolution patterns can the field-based researcher hope to transcend this tendency to project his own educative milieu and compare other systems--most of which are quite different--with that from which he has emerged. To

mitigate against the tendency toward myopic ethnocentrism in comparative educational research, Dr. Coolie Verner in his works on innovations suggests that certain guidelines (he calls them "propositions") be constantly kept in mind:

> Proposition One--Every society has a need for continuous learning, but the nature and content of the need varies from one to another so that a specific need existing in one society is not necessarily common to others.
>
> Proposition Two--Different societies develop unique methods to meet their need for continuous learning; consequently, a system of education established in one is not necessarily appropriate for another.
>
> Proposition Three--The method developed to meet a specific need for learning in one culture is not necessarily suited to the same need in a different culture.
>
> Proposition Four--A method developed at one place and time in one culture can be applied to the same need at other places at the same time in that culture.
>
> Proposition Five--A method developed to meet a specific need in a culture at one time is not always suited to the same need in the same culture at a different time.
>
> Proposition Six--A method developed to meet a specific need in a culture at one time may meet a different need in the same culture at a different time.
>
> Proposition Seven--A method developed to meet a specific need in a culture at one time may meet a different need in a different culture at a different time (Kidd, 1981, p. 220).

3. MODERN TAIWAN, SANCTUARY SECURE FOR CHINESE EDUCATION

Over the past two decades most of the writing done on Asia has been on politics and this has relegated Formosa to a misty corner of the modern mind. With this realization, every effort has been made to shed light on another,

and in all probability more important, dimension of societal development--education. The vehicle for this undertaking is this essay that has as its focus the educational system in Taiwan, particularly the modern Chinese high school.

Currently some 18.4 million peoples--Taiwanese, mainlanders, aborigines, and numerous expatriates--are living in peace, prosperity, and happiness on an island blessed with the legacy of China's splendid and protracted history, a strong and stable economic system, a paternalistic yet quasi-representative government, and a geographical setting that is as beautiful, diverse, mysterious, exotic, civilized, and modern as any location on earth. Chinese traditions, some of which have lasted for thousands of years, melded with age-old arts and complemented with natural beauty, form the island that today we call Taiwan. Fascinating landscapes, fertile fields, green valleys, rugged mountains that dominate the central part of the island, white beaches, pounding surfs, and offshore islets--these are what Taiwan is to those who are willing to seek them out. Yet the natural features of this island China pale beside the society's most precious treasure--the kindness, generosity, intellect, and creativity of the Chinese people who populate Formosa and who make possible an educational system that retains Confucian idealism, Deweyan practicality, and modern methodologies and materials of the West.

Taiwan is an island. It is approximately 125 miles from Fukien Province on the mainland, 400 miles south of Japan, and some 250 miles north of the Philippines. The island is bisected by the Tropic of Cancer; hence, the climate is generally moderate. The south of the island is usually warm, even in the winter. North of the Tropic of Cancer the island does get rather cool in the winters. It is not unusual for the northern section to have winter days in the forties.

If one looks at a map of Asia, Taiwan appears like a palm or tobacco leaf. Its total length north to south is about 250 miles, with mountains running down the center; and it is about the same size, in square miles, as New England. The island ranges from 75 to 125 miles wide.

Smaller islands and islets surround Taiwan. The most important ones are to the west in the Formosa Straits. The Penghu islet chain, Kinmen, and Matsu, all of which fall under the administrative authority of Taipei, the capital of Taiwan, are seen by the government as their first line of defense in the event of a military conflict orchestrated by the authorities on the mainland of Asia.

Taiwan is a province of China. From 1895 to 1945 Taiwan was under the severe colonial rule of Japan, which in 1895 was given the island by the defeated Manchus. The defeat of Japan by China and her allies in 1945 allowed for the retrocession of Taiwan to China. In 1949 the national government of China moved to Taiwan. Of all the provinces of China, none better represents, as a microcosm, the totality of the mainland topography better than Taiwan. Though it is the smallest of the provinces, the fact that it is an island and has its unique meld of mountains, flatlands, farms, and seacoast allows it to exhibit in compressed form most of the features of the Chinese mainland.

One of the factors that has had a direct bearing on the education of Taiwan is its unique econo-geo-political status. The relatively small size of the island, the heritage of China's educational history, and the modern day prosperity (second in Asia only to Japan) have allowed a centralized educational administrative configuration to develop and maintain high academic standards, proper behavior on the part of teachers and students, and an enthusiasm and respect for education and learning.

A montage of features that are quite unique to Taiwan have come together to enhance its educational system. It is quite impossible to deal with any of these in the full detail that they deserve. Volumes could be written about only one of the following topics; it is necessary, however, to look briefly at these tenets and to attempt to relate them to the modern educational setting in Taiwan.

4. TAIWAN IN THE CONTEXT OF CHINESE EDUCATIONAL HISTORY

The unique history of island China and the interplay of historical development and educational evolution have contributed significantly to Taiwan's current education paradigm.

Taiwan for nearly a thousand years has been considered a territory of China. The earliest contact between the aborigines of the island and China occurred in 605 A.D. when a Chinese sea captain attempted, unsuccessfully, to subdue the natives. Again in the mid-15th century, Chinese made contact with Taiwan and thus began the cross-straits migration from Fukien Province to Taiwan. The island became a haven for pirates as well as Chinese who chose to leave their mainland homes. It was during the Ming Dynasty that the island took its current name Taiwan, which means "Terraced Bay."

Organized education came to Taiwan (called by the Portuguese "Ihla Formoso" or "Beautiful Island") first by way of the Dutch, who set up missionary schools. The Dutch believed that if the indigenous populations

were educated they could be used more effectively as a work force. Also, the Dutch as well as the Portuguese wished to convert the population to the Christian religion through education and teaching. As a result, numerous missionary schools were established in Taiwan to carry out the policies of the church and the foreign profiteers. It was due to the Dutch and Spanish influence in Taiwan that the aborigines were given the opportunity to develop the Roman alphabet. Today many aborigines who live largely in the mountains and offshore islands can still use Roman characters.

Chinese conquest of Taiwan arrived in 1661 when Koxinga sailed from the mainland and dislodged the Dutch from their position of domain. Large numbers of Chinese who chose not to live under Manchu rule moved to Taiwan, and the island for a period of time became a bastion of Chinese culture.

Under the rule of Koxinga and his son Ching Cheng, a Chinese-oriented school system developed on the island. The purpose of said structure was to train Chinese youth for positions in government. There were basically three levels of schools: the district, the county, and the colleges. Only by passing rigorous examinations could the student matriculate upward in this system. Success was rewarded by immediate appointment to a government civil service position. This system prevailed under the Ching Dynasty (1644-1911) and was the basis for the educational system that prevails in Taiwan today.

Taiwan, which when occupied by Chinese administrators in the late 1600's was a prefecture of Fukien Province, became a separate province in 1884. The status of "province" allowed the island to begin developing in a number of areas. Schools for language development, technology, as well as preparatory institutions that would allow the graduate to matriculate through the competitive examination system all were established. Governor Ming-Chuan

Liu was in large part responsible for the enlightened leadership of this period. Unfortunately, Liu's successful educational planning and implementation were all but wiped out by Yu-Lien Shao who became Liu's successor. China at this time was going through a period of conservatism and anti-western sympathies, and the innovations of Liu were seen as problematic to the Ching court and its functionaries.

Yet during this period education in Formosa did make some strides that were to remain part of the social and cultural life of the island. In the English language perhaps the best account was presented by George Leslie MacKay, Doctor of Divinity, Princeton University. Dr. MacKay spent much of his life working with the people of Taiwan, and his delightful and scholarly personal account, FROM FAR FORMOSA, tells about his observations. In this writer's research on education on that island, no book found matches Dr. MacKay's general reminiscences for beauty, clarity, and honesty.

As part of his study, Dr. MacKay mentions only briefly the structure and methodology of pedagogy. The period about which he writes is from the mid-1860's to 1890, the years that he was in Formosa. Though not an academic source per se, like French scholar Alex de Tocqueville's masterly inquiry into democracy in America, MacKay's book does shed a great deal of light on a foreign nation. Education is discussed vividly yet briefly in his study.

MacKay indicates that education in Taiwan was an important part of Chinese culture and had been for at least a thousand years. The competitive examination that all young men could take was the method for academic, social, and economic advancement. These exams were given periodically at major cities of China (at Taipei and Tainan in Taiwan) and the scores were well publicized through the district, usually by posting them on a wall

board (a method still used in Taiwan). Passing these tests gave one the opportunity to seek appointments in government, education, or other governmentally controlled sectors of society. The exams, which culminated with the "great exam" held in Peking, focused primarily on the writings and ideas of the philosophers of Chinese society, particularly Confucius and Mencius; the sessions were grueling and the success ratio among these highly competitive students was quite low. In Taiwan the educational system was a powerful instrument for academic achievement. Few schools existed and tutoring was the main way that a youngster from the provinces could learn the materials necessary to succeed on the national examination. Also, few of the successful scholars who went to Peking to take the exam would, upon passing it, return to Taiwan, a province that was not considered as progressive economically or socially as areas on the mainland, particularly the region of Shanghai.

The teachers in Taiwan during this period were often men who had been candidates for the higher degrees but had failed and then returned to their home island. These men made up Formosa's intelligentsia and were employed by worthy families to teach the young boys. Also, a patronage system existed whereby a wealthy family would assist a less fortunate family in sending its bright son to tutoring sessions. This highly informal system--not sanctioned by government or philanthropic agencies--hurt the academic system of Taiwan. Many advantages found on the mainland were simply not available on the island.

Dr. George L. MacKay describes in some detail the excitement surrounding education circa 1890:

> A Chinese school is the scene of great industry and of great noise. The students all study aloud, and their shrill drawling voices make a disagreeable babel. The text-books are the Chinese classics, and the parents have no cause of complaint

on the score of frequent change. The books never change from century to century. The characters are first learned; but it is purely mechanical work, not the slightest attention being paid to the meaning of the words. The book-language is entirely different from the vernacular, and the boy has to commit to memory pages, and even whole books, without understanding anything of their significance. After years of such severe work the boys begin to prepare definitely for the competitive examinations. There is nothing really educative in the system. Unconsciously the style and sentiments of the books are absorbed, but originality, in either thought or expression, is not only undesirable, but utterly impossible.

When a young man succeeds in passing the examinations for even the lowest degree, preparations on a most elaborate scale are made at his home for honoring him on his return. No one but an eye-witness can imagine the scene. A feast is prepared, theatrical performers are often engaged, a procession goes out to meet the graduate, who affects all the airs imaginable, and his conceit is swollen beyond endurance. His swagger is supercilious to the point of silliness. To recognize his old companions is a condescension for which they feel extremely grateful. The whole performance tends to make these graduates the most obnoxious of all the people one meets (MacKay, 1985, pp. 117-18).

5. TAIWAN EDUCATION UNDER JAPANESE OCCUPATION AND RULE

The year 1895 was of great significance in the history of education in Taiwan for in that year, after much bloodshed, the Sino-Japanese War (1894-1895) ended. Japan's success in this event gave her the right to dictate the terms of the treaty of settlement. Referred to as the Treaty of Shimonoseki, Japan for the first time in its history acquired territories that were outside of what most considered her sphere of influence. This was, of course, a precursor to events that were to further germinate in the mid-20th century and culminate with World War II. The provisions of this peace treaty provided for numerous concessions on the part of China; most important among these was the ceding of the island of Taiwan to the Empire of Japan. Taiwan would remain a colony of Japan until 1945, when it

would again be incorporated into China as one of its provinces. The apocalyptic nature of this event in Japanese-Chinese history is noted by the scholar Yosaburo Takekoshi who, in reference to the annexation of Formosa, stated: "It is a day long to be remembered by us, because on that day the people and the territory belonging to another nation [China] were transferred to our rule, a fact never before met with in all the twenty-five long centuries of our nation's existence. . ." (Takekoshi, 1907, p. 12).

In conversations with scholars currently living in Taiwan who remember the period of Japan's control, the views expressed are revealing and interesting. Though these Taiwanese did, and do, consider themselves Chinese, they believed that the fifty years of Japanese administration were, overall, not without some advantage. Early in the period resistance and bloodshed were common as the Taiwanese chose not to cooperate with their new governors. The population was about three million at this time, but generally the two peoples began to respect each other. Older scholars who today speak of the occupation period remember it in two phases: the era of repression, which lasted until the mid-1920's, and the era of cooperation when the Japanese and the Taiwanese began to work together to develop their homeland.

One field that the scholars with whom this writer spoke were quite positive about was the Japanese education policy in the period 1925-1940. This no doubt reflects a bias--the professionals who felt that positive accomplishments in education were made in this age were men and women who themselves had received their primary and secondary education in Japanese-schools. It is quite impossible to judge the quality of the educational experience in these schools, yet the scholars who attended them and who today are part of the educational structure in Taiwan remember this period in a not unfriendly way.

One of the earliest Taiwanese educational leaders in the Japanese period was Lin Hsien-tang who had been a student of Liang Chi-Chao, a respected and well-known Chinese scholar. Liang argues that the Taiwanese should attempt to work with the more progressive members of the Japanese group in Taiwan and that through cooperative efforts the Japanese and Chinese could live in peace and all mutually benefit. Lin Hsien-tang was to be in the vanguard of this movement, particularly as it was relevant to educational development--an area to which he was to give his greatest counsel.

Education in Taiwan was quite disorganized. The Chinese, with their thousands of years of academic and scholarly excellence, had during the late Ching dynasty become corrupted. Military humiliation, territorial loss, and the evident decline of the Manchu dynasty all led to a decline in national spirit that is still seen in the opulent, garish art of these last years of the Ching. Taiwan education (the island being some 250 miles from the mainland) was in a shambles and few plans for its improvement had been devised by the central government on the Chinese mainland. The Japanese, on the other hand, had been successful in modernizing their educational system and were willing to share with their new hosts the success of their experience. (In 1872 Japan had started mandatory elementary school education for all.)

The Japanese began their education policy with a paradox: Was the educational system to teach the Taiwanese advanced scientific education, which would allow them to be successful in career endeavors and consequently prosperous, or should the thrust be in the direction of assimilation? That is, should the Japanese-administered school emphasize Japanese language and culture over academic and skill courses that could lead to personal self-betterment of students? Initially the assimilation concept was allowed to

prevail. The Japanese, it seems, hoped to make Taiwan an integral part of the Empire and perhaps, in time, allow it to govern itself as an autonomous Japanese province.

In a few years the assimilation concept was replaced with more practical educational objectives. Chinese students were then allowed to pursue their formal study beyond the traditional elementary phase. This was a major alteration in the Japanese colonial educational policy and recognized the concept of education as an end rather than purely a means toward political and cultural assimilation.

In this context, Yosaburo Takekoshi in his important 1907 study stated: "Our educational authorities were confronted with a difficulty which they did not know how to avoid. Should they give the people a practical scientific education and thus enable them to better themselves, have more comfortable homes, and make more money; or should they give such an education as would assimilate them with us Japanese?" (Takekoshi, 1907, pp. 15-31).

A dual system of education was eventually established in Taiwan during the era of Japanese administration. Communities continued to provide basic educational skills in which Chinese-Taiwanese traditional education was emphasized; however, these were inferior to the other system which was for the Japanese and their families. Modeled in subject and methodology on the Japanese compulsory educational system established in Japan in the early 1870's, these schools were located mainly in the areas most closely associated with the colonial administrative system--the large cities and seaport communities. Though not forbidden to attend these schools, the Taiwanese were not accepted for admission in large numbers. Consequently, during the period of Japanese rule, the Taiwanese generally could not go beyond the primary school level; the few who did gain admission were able to advance

through the middle and high school grades and in some few cases matriculate to overseas colleges and universities. The main place where young men could go for their education was Japan; some few came to the United States, and a very small number went to Europe.

It was not until the 1920's* that Japan expanded educational opportunities in Taiwan. W. O. Goddard in his book, FORMOSA: A STUDY IN CHINESE HISTORY, paints a gloomy picture of educational opportunities under the "Japanese Occupation." Though only about 50 percent of the Taiwanese were afforded a basic education during this period, this is probably not terribly different from educational opportunities available on the Chinese mainland. H. A. Franck, who visited Taiwan in 1925, makes this statement which perhaps best sums up the educational policy in the period of Japanese administration:

> Primary school for the Japanese and the Formosans are separate, but the Formosan children must learn Japanese, since teachers are forbidden to teach in the Formosan language. No Formosan children can go to a government school unless he can speak Japanese and, according to a new ruling, no more private schools can be opened. There are still a few tutor schools, but even in these, Japanese must be taught (Goddard, 1966, p. 163).

During the early 1920's, scholars like Lin Hsien-tang were able to bring about some education reform and a very few middle and high schools were set up in Taiwan for Chinese. Japanese language studies, however, were an important part of these institutions. Few vocational schools existed in Taiwan at this time, and only a very small percentage of the population could follow this path for educational enrichment.

Interestingly, the very best university in Taiwan today has its roots in the era of Japanese occupation. National Taiwan University was established

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*In 1919 and 1920 Japan passed two ordinances aimed at extending secondary and technical education to the Chinese youth of Taiwan.

in Taipei (Taihoku was the Japanese name given to this main city on the island). The institution existed mainly to allow the Japanese a place to send their children for advanced study. Few Chinese were admitted, and the ones who did attend National Taiwan University were allowed to earn degrees in only one field--medicine. Today a disproportionate number of physicians in Taiwan are of pre-1940 Chinese ancestry. The medical field is virtually dominated by the Taiwanese who found as their vehicle for academic and financial success the field of medical science. Those Taiwanese who went to school at the Japanese universities in Japan majored in law or medicine, two skills that could be used most fully upon their return to their native island.

On reading the policies of the Japanese administrators in Taiwan and also after discussing educational policy with Chinese scholars who in the late 1930's were educated in primary schools, one senses that, had the tension of World War II not been mounting, Japan's policies would have been liberalized in the field of pedagogy. External forces--the Sino-Japanese conflict that began in 1937, the rift with the U. S. and other Pacific powers, and the movement of Japan from its constitutional and quasi-representative government into a more authoritarian and promilitaristic posture--destroyed the hope of the few Taiwan intellectuals like Lin Hsien-tang who were somewhat optimistic about the future relations of the two supreme oriental peoples.

Scholars educated in the period 1925-1940 do not now generally remember the era as one of severe oppression or disdain. They feel that the Japanese were generally fair rulers within the harsh reality of the colonial concept of occupation and that opportunities for educational advancement that were not available early in the occupation were beginning to develop in the

1920's and 1930's. Whether these men and women who were interviewed represent a general and accurate portrayal of the 1930's and the Japanese schools is difficult to evaluate. Yet this writer suspects that the school policy toward Taiwan in this era would have been improved and an expansion of educational opportunity--a cause célèbre in Japan at that time--would have spread had World War II been avoided.

Chinese colleagues have suggested that this interpretation represents a minority view; for, as long as Japan remained in Taiwan as a colonial force, conditions for the indigenous population would have remained oppressive. History does suggest that colonialism is self-destructive and the self-determination of a peoples will eventually destroy even the more enlightened colonial occupier.

The defeat of Japan and the retrocession of Taiwan to China created numerous administrative and logistical problems for the island's educational infrastructure. One major problem was related to teachers: Fifty-one percent of all teachers in Taiwan were of Japanese ancestry and at war's end were given the option of returning to their homeland. This created a vacuum, and replacements for the schools in Taiwan were hard to find. A re-Sinofication of the population in Taiwan also presented problems, as did a reintroduction of the Chinese Mandarin language, the distribution of textbooks, and the overall administration of the school system. All things Japanese were scorned, yet a full complement of Chinese teachers, books, and administrative support systems were not available.

In 1949 another crisis for Taiwan education and people developed. It was in that year that the national government moved from the mainland to its island province. Yet with these problems of dislocation, turmoil, and

mobility, the educational system in Taiwan under Chinese rule now continued and by the mid-1950's was organized, structured, and bringing to the people of island China opportunities for learning and upward mobility through the conduit of academics, study, and scholarship.

6. SAN MIN CHU-YI AND EDUCATIONAL DEVELOPMENT

Since the founding of the Republic of China in 1911, most official statements that are relevant to national educational policy have made some reference to the SAN MIN CHU-YI (THE THREE PRINCIPLES OF THE PEOPLE). The essence of the SAN MIN CHU-YI, which was written as a collection of essays by Dr. Sun Yat-sen, is to assure the peoples of China "Democracy" as a way of government, "Nationalism" as a goal for self-determination and political homogeneity, and "People's Livelihood" as a model for bringing about a people-oriented social/welfare system to assure economic and cultural equity and opportunity.*

Because SAN MIN CHU-YI plays such a vital role in the thinking of the Chinese leadership in Taiwan's education system, it is appropriate that this vital document and the man who prepared it both be looked at carefully.

Scholars differ as to the exact place the writings of Dr. Sun Yat-sen have in the realpolitik of day-to-day activity in island China; yet a cursory review of the literature that deals with Taiwan's development since the late

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*Parts of this discussion of SAN MIN CHU-YI have appeared in my book IN THE IMAGE OF CONFUCIUS (1983).

1940's--and specifically a review of the curriculum of colleges, universities, and public and private primary and secondary schools--suggests that the SAN MIN CHU-YI has been a cohesive force in the society. Not only has this work been a binding factor, it has also given the people of Taiwan an intellectual base upon which to reconstruct their society.

In the public high school of Taiwan, an integral part of the curriculum consists of the study, evaluation, and assimilation of Dr. Sun Yat-sen's SAN MIN CHU-YI. Like the American Declaration of Independence, which sets forth both an abstract revolutionary and nationalistic framework for nation-state development, the SAN MIN CHU-YI outlines for the Chinese people--in a vagueness that lends itself to numerous interpretations--a set of ideals and principles for making modern China a synthesis of the best of her ancient heritage and the ideas and values of the West.

Besides the SAN MIN CHU-YI, Sun penned such other important works as CHIEN-KUO FANG-LUEH (PLANS FOR NATIONAL RECONSTRUCTION), SUN WEN HSUEH-SHUO (POLITICAL PHILOSOPHY OF SUN YAT-SEN), and MIN-CH'UAN CH'U-PU (FIRST STEP TO DEMOCRACY). Developing his principles through the early 1900's, it was not until 1924 that they were ready for formal presentation to the people of China. Unfortunately, Dr. Sun's illness and death prevented the SAN MIN CHU-YI from reaching its finalized version. Had Sun lived longer, it is suggested that he would have made revisions and defined more clearly his ideas, particularly those in which he discusses the socioeconomic development of China. Yet even with its imperfections, THREE PRINCIPLES OF THE PEOPLE is a brilliant analysis of the protracted history and culture of China and the need for modernization along Western lines. Sun dealt only peripherally with education; it is implicit in his writing, however, that he saw the need for an educated populace which would engage in the revitalization and modernization of China.

THE THREE PRINCIPLES OF THE PEOPLE addresses the issues of "Nationalism," "*Democracy*," *and* "*People's Livelihood*."

"Nationalism" to Sun was the first step in the developmental process all nation-states must follow. China in this period was fragmented due to a number of factors. Numerous nations had established spheres of influence in China and these had been formalized by treaty under Manchu. Sun believed that it was necessary for China to become her own master and, to do this, the treaty-system that had existed since the Opium War had to be revised. Sun also believed that the Chinese had to give up certain traditions, namely, their unwavering devotion and loyalty to the extended family--and redirect this to the nation-state (D. J. Li, 1978).

> "Facing China at this time was the unequal treatment of certain Chinese ethnic minorities. Sun Yat-sen addressed this issue by saying that all Chinese, be they of the Han or other group, must have the same equal legal, economic, and political prerogatives. When this eventuated, all Chinese would be one family of people and the history of regional conflict that had so weakened China could be ended. These steps were necessary as a precursor to China's moving into the international association of nations; her own national sovereignty was the first step toward being treated as an equal in the world community.
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> "The SAN MIN CHU-YI addresses next the subject of "democracy." China, having lived under dynastic rule for thousands of years, must move slowly into democracy. Sun saw three states: (1) Military rule that would unify the nation and ensure its integrity; (2) a period in which a single political party--humane and representative--would govern for the good of the

people; (3) the final phase in which the political party would willingly turn over the control of the nation to a popularly elected national government. The exact model--parliamentary or presidential--is not answered but one must remember Sun's great respect for the United States system.

"Leadership of the new democratic China would be in the hands of the intelligentsia. Sun believed strongly in the competitive examination system and only men or women who had excelled in the testing process could achieve high office. Equality in mankind is an abstraction and not a reality, suggests Sun. In this concept we see Sun's familiarity with Plato's REPUBLIC. The fabric of the government would have woven into it checks and balances; no one branch would be able to dominate--rather all branches (executive, legislative, judiciary, examination, and censorate) would work in constitutional harmony.

"To the people of the Republic of China, Dr. Sun Yat-sen is envisaged both as a statesman and a philosopher. His principles are learned by all of the children in Taiwan and, like Confucius, his influence on Chinese society continues to be a profound vehicle for national synergism. He was a man of the highest personal integrity and ethics, and even his political and ideological adversaries respected his brilliance and tenacity" (Smith, 1981, pp. 17-21).

7. CHINESE PEDAGOGY AND THE DEWEYAN LEGACY

Contributing to the structure and methodologies found in Taiwan's secondary school system are certain foreign philosophies. Germany, Japan, France and the United States have all had ephemeral influences on education in modern Taiwan. One foreign educational theorist, however, tends to be viewed by Chinese scholars as the dominant influence of all of those persons and ideas that come from abroad to contribute to Chinese educational theory and practice: John Dewey left his intellectual legacy in Chinese education history.

America's most famous and respected philosopher and educational theorist, Dewey has had a great influence in the development of modern pedagogy and curriculum design in Taiwan. He spent two years (May 1, 1919, to July 11, 1921) in the Orient, and his lectures on education were so successful that they were reproduced in Chinese newspapers and immediately put into booklet form. They have only recently (1973) been retranslated into English, the language in which they were originally delivered.

In 1919 after spending a moderately successful three months as a lecturer and adviser in Japan at the Imperial University of Tokyo, John Dewey, who was on leave from Columbia, accepted invitations from a number of China's best universities to lecture. (Dewey's main complaint about Japan was its antiliberal bias.) His wife, Alice Chapman Dewey, accompanied him on his oriental sojourn, as did his daughter, Lucy.

The Deweys arrived at Shanghai on April 30, 1919, and with the help of interpreters and friends spent their first few weeks sightseeing. Dewey was to become particularly fond of the Chinese people, their good naturedness, and their extreme courtesy. He summed up the temperament of the Chinese whom he met on the streets and at shops in this way: "Live and let live is

the response to crowded conditions. If things are fairly well off, then let well enough alone. If they are evil, endure them rather than run the risk of making them worse by interference" (Dykhuizen, 1973).

Early in Dewey's tenure in China he had the opportunity to meet Dr. Sun Yat-sen, the founder of the modern Republic of China. Their discussions centered on the philosophical topic of "knowing" and "doing." The prevailing reactionary Chinese axiom on change was summed up by Dr. Sun as follows: "To know is easy; to act is difficult." Sun's view and one that was supported by Dewey in their lengthy conversations were quite the opposite. As Dr. Sun was to write in his book ON PSYCHOLOGICAL RECONSTRUCTION, "To know is difficult but to do is easy." Before publishing this major work, he conferred with Dewey who concurred with this pre-active-oriented position. This new theory was to have a patulous impact on intellectual Chinese society.

When Dewey spoke at universities or student unions, a number of Chinese students who were fluent in English interpreted the lectures in the Chinese language. Dewey's notes would be given to these students to assist them in their transcription and translation. Others would transcribe them for publication in journals and newspapers. One of these scholars was Hu Shih, who was to become a leading intellectual in 20th century China and a fervent supporter of Deweyan thought. Hu Shih had been a favorite student of Dewey's at Columbia and had been converted to the philosophy of instrumentalism while there. As one of the earliest and most articulate spokesmen for educational pragmatism and cultural ethical relativism, Hu Shih was to be in the vanguard of every major intellectual movement in China until his death in the mid-1960's. Academia Sinica, a major research institute in Taipei, was founded by Hu Shih; a delightful park near the research center is named after this important scholar, and his home on the grounds of Academia Sinica

has been preserved as it was on his last day. Visiting the home of Hu, one is struck by the photographs of a middle-aged John Dewey and a youthful Hu Shih. These and other mementos of their famous friendship are in the home and the museum that is attached to the house.

It would be quite impossible to review all of Dewey's Chinese lectures. They ranged in topic from "Social and Political Philosophy" to "Ethics" to "Modern Trends in Education." Over sixty major lectures were delivered, and they were to become a catalyst for intellectual and social change in China. Dewey's main contribution, though, was in the area of education. At National University in Peking, Dewey was awarded an honorary Ph.D. The rector of the University, Dr. Tsai Yuan-pei, in making the presentation referred to Dewey as the "Second Confucius"; the students and faculty in the audience are said to have applauded for a lengthy time expressing their sincere approval of this accolade (Dykhuizen, 1973).

To review his lectures would be infeasible; to sum up his philosophy vis-a-vis the Republic of China is possible. A recurring theme that Dewey stressed during all of his oriental lectures series was that the purpose of traditional, classical philosophy, be it in ethics or pedagogy, was to perpetuate the concept of fixed values in all areas of life and then apply human reason to justify the inflexibility of standards of right and wrong. Dewey emphasized that man had moved far ahead in the areas of science, technology, industrial development, and thought. Evolution, the ideas of psychology, and other new paths of concern now allowed man to think in terms of what was specific, humane, and changeable. He emphasized the need to rely more on individual thought and less on traditional authority and societal organization. The idea and value of change, experimentation, and reevaluation of traditional concepts, progress, and a continuation of a bettering society

for man were the bulwark of Dewey's ideals; knowledge of nature, he believed, would allow mankind to control her and through this control achieve progress and continued self-perpetuating growth. His philosophy ran counter to the mores of Chinese society which for thousands of years had followed what one could call intellectual reactionaryism (Dykhuizen, 1973).

Concrete thought rather than evasive abstraction was needed if practical solutions to China's and the world's practical problems were to be achieved. In his lectures on education, Dewey made a series of statements on the proper attitude toward the raging conflict in China between the traditional cultural pillars and new ideas. He believed that schools should adopt four values that would meld the old and the new: (1) open-mindedness, (2) purposefulness, (3) social and personal responsibility, and (4) appreciativeness.

Education and ethics were interwoven for Dewey. This did not escape the Chinese intellectuals who also saw the teacher as both a transmitter of information and a standard-bearer of ethical and moral righteousness. One must remember that China's greatest teacher--Confucius--was the persona magna of ethics, intellect, and pedagogy.

When commenting on ethics, Dewey stated that it was an attribute of environmental circumstances. Consequently, ethical and moral behavior were not of transcending fixity but varied with the demands of the society. Ethical relativism, a new standard to judge morality, was the basis of Dewey's message. He attempted, using that model, to explore the differences between the moral posture of the Eastern and Western civilizations. His conclusion was this: "(1) Eastern ethical thought is more concerete, more practical, while Western ethical thought is more abstract and more intellectual; (2) Western morality is based on individuality, while Eastern morality is based on family; (3) Western morality respects the right of the individual, while Eastern morality [In a relative sense] ignores it" (T. C. Ou, 1978).

John Dewey's influence on the modernization of Chinese education cannot be fully and quantifiably ascertained. Professor T. C. Ou, former president of New Asia College of Hong Kong, has stated this:

> The influence of Dewey on Chinese education is general and even total. It was brought about by conferences with educators while Dewey was himself in China and also by his publications, almost all of which have been translated into Chinese and by outstanding students, who are the leaders of Chinese education. Among these are Chiang Monlin, ex-minister of education and rector of National University of Peking; Hu Shih, an ardent pragmatist, who inspired the movement for a New Culture, and who was also a professor there at the time, and P. W. Kuo, the ex-rector of the National Southeastern University, Nanking. The renown and activity of these men have been very influential in bringing about popular acceptance of Dewey's teaching and putting it into practice (T. C. Ou, 1978).

The specific areas in which Dewey's writings and lectures on Chinese education in Taiwan (a place he never visited, though he did go to Fukien Province which from the mainland is closest to Taiwan) can be seen in both the theoretical and the practical. When considering the theoretical dimensions of Dewey on China, one can point to the fact that his textbooks, most of which were translated into Chinese, were required reading in most Chinese teachers colleges (and still are). DEMOCRACY AND EDUCATION was in general use in all normal universities, and in Taiwan it is still considered a classic. Also his Chinese students from Columbia carried forth his message and influenced greatly the intellectual climate in educational circles throughout Asia. Practical application of Dewey's principles of education and curriculum content were also adopted. Chiang Monlin was an early convert to Deweyan ideals and, while at the Ministry of Education, helped schools be "the cultivation of perfect personality and the development of democratic spirit."

The public school system of China was made to conform to the American model with the 6-3-3 plan adopted. This system is still used in Taiwan

today. The goals of the new schools were: (1) to promote democracy at all levels, (2) to help foster the notion of social evolution, (3) to take the economic status of people into consideration, (4) to promote education as a period of preparation for life, (5) to allow the school a degree of autonomy and flexibility at the local level, and (6) to use the school as a laboratory for life in society.

Child centeredness, pragmatic-instrumentalism, and continuing experimentation in education were to become part of the Chinese educational experience; and these can be traced to Dewey's influence. Also, Dewey was a strong advocate of textbooks written in Kuo-Yu or the spoken language, believing that this would help democratize the classroom.

Perhaps a person's importance can be deduced by the intensity of his detractors. In the early 1950's, the leading Chinese educators in Communist China launched a steady high-powered campaign against Dewey and the ideas of pragmatism. As quoted in Hu Shih's article, "John Dewey in China" (PHILOSOPHY AND CULTURE: EAST AND WEST), a Chinese Communist education administrator writing in "Peoples Education" (Peking, Oct. 1959) stated: "If we want to criticize the old theories of education, we must begin with Dewey. The educational ideas of Dewey have dominated and controlled Chinese education for thirty years, and his social philosophy and his general philosophy have also influenced a part of the Chinese people."

Though a statue or painting of Confucius can be found in all high schools in modern Taiwan, one suspects that a small likeness of John Dewey would also be appropriate. Dewey, more than any other foreign philosopher, was able to synthesize the traditional Confucian values with the pragmatism and relativism of the modern West.

8. THE TRADITIONAL CHINESE EXAMINATION SYSTEM AND ITS INFLUENCE ON MODERN TAIWAN ACADEMICS

The examination system in China began as a highly progressive and enlightened means of limiting and eliminating appointments to high government office on the basis of influence and nepotism and, secondly, as a device to bring the finest scholars and functionaries into leadership position. It was ended in 1905 as an impractical and reactionary procedure for bringing people to the civil service. For some two thousand years of Chinese history, though, the competitive examination had been the main vehicle for a person to achieve positions of power, greatness, and respect.

It was during the Han Dynasty (202 B.C.-220 A.D.) that the examination system saw its genesis. Yet not until the Sung period (960-1279 A.D.) did the process begun in the Han reach its fullest level of sophistication. Due to the development of the printing press in China, books by this time had become readily available to the populace. The writings of Confucius, however, became the main area that the young scholar would study and upon which he would be examined. Upon completing the lengthy process of passing local, district, provincial, and national examinations--a process that might take 20 years--the emperor, based on examination results, would award the successful scholar with an important position in government.

The examination throughout China's long and splendid history may be regarded as a major event in the nation's life. Cities that for most of the year were listless became places of great excitement during the examination season.

There were weaknesses in the Chinese examination system. Cheating was always a problem, and students would contrive elaborate methods of beating the system. Competition was exhausting. Because the examinations tested

students over the same topics year after year, an unparalleled uniformity of thought was enforced. This led to conformity of ideas and to a degree of stagnation in intellectual flexibility.

The pedagogical process that prepared youngsters for the examination system (Ching Dynasty) was quite unlike what we in the West think of on hearing the words "school" or "education." Private tutors were employed. The institutions that were the "schools" for these would-be scholars were really limited to places where a person could register for the examination and perhaps get some advice on what books to read and whom to contact for further instruction. Though these settings during the Ming and Ching dynasties were government maintained, they can in no way be considered "schools" as we in the West have come to know that term. Most real education took place in private academies that were set up by communities for their sons. Formal education began when a boy was seven and would continue until he was in his forties. Instruction at the academies centered on the FOUR BOOKS OF CONFUCIUS. Memorization, repetition, and an emphasis on self and class discipline characterized these schools. The regard for proper behavior is reflected in the statement: "If education is not strict, it shows that the teacher is lazy." Not surprisingly, this view is held today by the leaders of education in modern Taiwan. Ichisada Miyazaki indicates that a student, to have been successful in his "primary education," would have had to learn 431,286 characters, for that is how many inclusively are in the various standard texts (Miyazaki, 1976). Many of these characters are repeated in texts, so it was not 431,286 different ideographs; still, these had to be committed to memory, and the length of time to do this was six years. Two hundred characters a day were required to be learned if a child was to keep pace with his classmates. Only the most hardy of body

and mind could maintain this pace, and a Darwinian view of education--"only the most fit shall survive and rule"--cannot be disregarded when one looks at traditional Chinese education and examinations.

In conclusion, the Chinese examination system prior to 1905 had as its strengths the following characteristics: It was open to all qualified applicants; it was a fair system for all who were able to compete; it allowed the government of China to have persons of new ideas in leadership positions; it diminished the influence of the traditionally powerful inherited aristocracy; and it gave a sense of serene peace to even the humblest family in that they knew their son or grandson or his sons might be a great leader if he applied himself to his studies. Perhaps most importantly it gave to the people of China a sense of social mobility for themselves or their children. This, it has been suggested, mitigated the causes of social unrest, frustration, civil disorder, and national revolution.

9. PEDAGOGY OF THE SAGE: THE CONFUCIAN IDEAL AND CHINESE EDUCATION IN TAIWAN

Confucius, who lived 500 years before Christ, must be considered one of the world's greatest thinkers and educators. Like Buddha, Christ, and Mohammed, Confucius influenced civilizations and centuries with his concepts of ethics, relationships, and pedagogy. Unlike the other three aforementioned, Confucius was a complete historical figure whose teachings are based more on historical fact and less on myth and legend. Confucius did not emphasize

religiosity in his teaching; one could suggest that Confucius set the tone of theological skepticism which was to dominate the literati who ruled China until the 20th century.

Confucius' outlook was practical, conservative, and centered on how humankind might live together in a peaceful, harmonious, and prosperous community on planet Earth. He saw in the China of his time corruption, violence, and endemic vice. It was his goal to return China to a stage in its historical development that was without these negative qualities.

The sanctity of relationships is the essential theme of Confucian teachings:

1. Governmental authority and subjects.
2. Parent and child.
3. Brother and sister.
4. Husband and wife.
5. Friend and friend.

The result of these relationships and the other teachings of the sage suggest that the individual must exercise at all times a certain inner discipline, a certain kind of self-control--an extension, to quote Bertrand Russell, "of the kind which children learn when they are taught to 'behave.'" He should not allow himself to break into violence or overt anger; he must be modest in all of his dealings; he must never carry love or hatred to extremes; he must save face and never inflict further humiliation on his defeated adversaries. In summary, he must know and understand his place in society, respect the persons about him, show moderation in all of his doings, and remain calm, inscrutable, and in control of all of his actions.

Most of the writings on Confucius deal with his general philosophy of living in harmonious relationships with others. However, it is important in this essay on secondary school education in Taiwan to review Confucius as a teacher.

Confucius' main goal was to make his students into gentlemen. Neither poverty nor humble birth acted as a barrier to studying with Confucius, yet he encouraged only those with great energy and enthusiasm for learning to enroll in his classes. Students would travel great distances to study with the sage; many would live in his home. His method of instruction seems to have been completely informal, and there is no mention in the literature of examinations or formal lectures being part of Confucius' pedagogy. What one can suggest is that the sage used a tutorial approach to bring about the best in his charges.

Confucius did not teach specific subjects; rather, he taught certain students who seemed to have an aptitude for scholarship. Therefore, his methodology was intensely individual and was related to the student's readiness to learn and personal development.

To determine how to motivate a student to learn, Confucius would spend long hours allowing him to discuss his ambitions and frustrations. Listening in a non-judgmental way encouraged the student to speak openly. During those interviews, the sage was storing away impressions that would allow him to help the young man at some future time. This statement shows us something about the method that Confucius would use in preparing his pupils: "Jan Chiu is lacking in zeal, so I urged him on: Tzu-lu has more than his own share of energy, so I held him back" (Creel, 1949, p. 79).

Confucius was not a severe disciplinarian. In all ways his emphasis was "not on punishment for wrongdoing but on stimulus toward right-doing,

not on coercion but on persuasion; consistently his emphasis was positive rather than negative" (Creel, 1949, p. 80).

He was a man who showed great respect for his students and taught them as much by role-modeling as by lectures. Confucius' attitude toward his pupils was that of a father and mentor, and he did not attempt to overwhelm these young men with his own genius but was willing to share with them his wealth of knowledge and wisdom. Ideally this is how the teachers of modern Taiwan are encouraged to work with their students in the high schools and colleges of island China.

10. THE PROLONGATION OF THE CHILDHOOD EXPERIENCE

An eminently noticeable feature of modern society in Taiwan is the real difference in the way the students stand out from the rest of society. It is the policy of the educational leadership to make the learning experience unique in a young person's life and to make those years when a boy or girl attends primary, middle, and secondary school a time of specialness.

In the United States and in most of Europe, the childhood experience has been eroded. Young people are encouraged by television commercials, peer pressure, and the might of industrial advertisers to become adults at as early an age as possible. This adultification has robbed Western children of the childhood experience that is so important in developing imagination, creative skills, and personal relationships. Television has played a major role in this problem. Neil Postman suggests that the replacement of the

art of reading with the television has deeply influenced the normal social, intellectual, and emotional growth of the young people in America (Postman, 1982). Television sends the same message and information to all who watch it, be they 5, 16, 30, or 70. Because the programming elite of television are eager to appeal to that group in society with the greatest purchasing power, the programs developed are aimed at younger and older adults. Yet the messages in these programs are available to any who watch them. Many of the shows seen on television glorify falsely the adult world and encourage youngsters to emulate adult behavior patterns, language, and morality.

Postman contends that the development of the book in 15th century Europe brought about the concept of childhood as a separate period in a person's life. Before that time adults and children probably had the same entertainment, values, language, and activities. The written word requires certain skills to understand, and only a mature person can develop the skills necessary to read. As a consequence, the advent of the printing press ushered in the childhood experience as a separate stage or level in the growth process. The advent of television--which requires no skill to comprehend--appears to be challenging the childhood experience.

In Taiwan a conscious effort has been made to prolong childhood. Children who attend school must conform to strict codes of behavior, deportment, and conduct, including dress codes, grooming regulations, and appropriate social, physical, and entertainment activities for youth. Television shows in Taiwan of a purely entertainment value are shown at selected times; at other hours educational television dominates the airwaves.

Emphasis in the schools is placed on punctuality, politeness, personal health and hygiene, respect for one's peers and teachers, concern about the environment, and academic preparation. Dating is discouraged. Coeducational

programs and schools, as a rule, do not exist; and all boys/all girls schools are the rule, not the exception. The educational authorities believe that there should be no unnecessary distraction to the orderly process of teaching and learning. They also believe that coeducational activities, improper dress, and hair styles that might reflect vainness or conceit are not conducive to the reason why children are at the high school--to learn and to prepare for the rigors of the competitive examination that must be passed to move into colleges and universities in Taiwan.

In modern Taiwan, children are given great consideration in their education opportunities. Families will make major sacrifices to afford their offspring a good education. Housework, chores, and part-time jobs are virtually unknown to the boy or girl who is at an academic high school. Conversely, the youngster is expected to do three to five hours of homework each day to assure this progress in his academic endeavors. The process of centering the child's life on the educative process of reading, computation, and the dynamic social, cultural, and intellectual curricula and extra-curricular activities tends to prolong the childhood experience. This experience, psychologists suggest, is related to contentment in later life; frustrations with not having had a full childhood may often appear in unsocial behavior in adults who subconsciously are attempting to recapture areas of the youthful developmental process that were never available to them.

One difficulty caused by the prolongation of the childhood period is in the realm of social interaction between men and women. Counselors and psychologists in Taiwan are quick to point out that fears and shyness often accompany men and women even in their 20's when they do begin to have co-sexual social life.

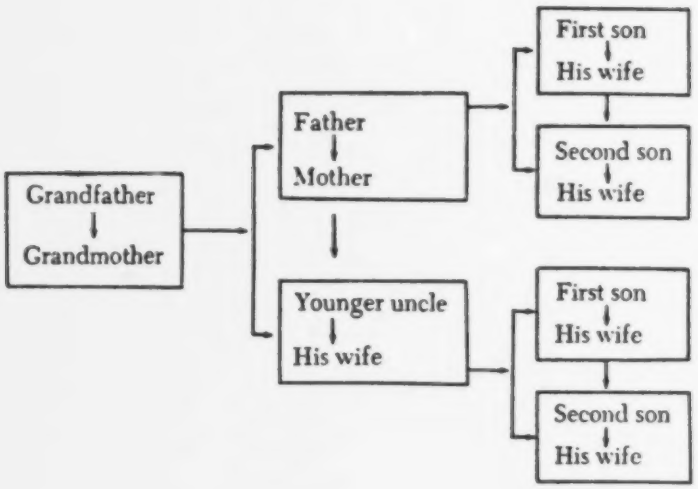
Yet the integrity of the childhood years as ones of freedom from mimicking the adult experience are maintained through the coordinated efforts of the public school leadership, the parents, and the other segments of Taiwan society.

Parenthetical to the purposeful prolongation of the childhood experience is the unique configuration of the traditional and modern Chinese family in Taiwan.

Family life is the central institution for all that happened in traditional China; it continues to play a major role in the life of modern Taiwan's people and interacts directly with the educative processes of the island society. Though the traditional extended family in which many generations would live in the same home or compound has disappeared from most of the Taiwan landscape, the concept and the influence of "family" remain a dominant factor in social and economic vitality. Nucleus family models--where a husband, wife, and children (average three in Taiwan) live in the one domicile--are now very common. Only on the larger farms in the beautiful countryside of Taiwan can one find grandparents, parents, uncles and aunts, children and their spouses, and grandchildren living in the same large U-shaped, single-level home. Urbanization and industrialization have led to two dynamic qualities that have slowly eroded the extended family--fewer children generally are born to urban families, and industrialization has tended to give younger persons greater economic independence and, as a consequence, less eagerness to remain under the watchful eyes of their parents and grandparents.

Traditionally, the senior male of a family, if his health allowed, would rule the household till his death. He would be followed by de facto rule of his wife; real power would, however, go to the next oldest male,

usually the first son. Children, because of economic dependence, the honor of the family name, and the Confucian ideal of reverence to one's elders and of one's ancestors (filial piety), would remain part of the surname structure and take their place in the elaborate schemata that characterized the Chinese family constellation. The chart below is a generalization of the family structure of traditional China and rural life in Taiwan:



(Dun J. Li, 1978, p. 359)

In modern Taiwan, as was the case in traditional dynastic China, the family's reason for being is in the children. Boys have always been more desired than daughters, though today this is much less the case. The logic behind this was essentially economic--a son could carry on the family name, inherit the household, and, most importantly, assure a life of comfort for his parents in their old age. Girls seldom had these prerogatives.

Yet all children were and are loved. No statistical information exists, but history suggests that the children of China have always held a much more important place in the family configuration than in the world's other highly sophisticated societies. Even today as one walks the streets of Taipei,

Kaohsiung, and the other cities of Taiwan, one senses, on observing parent-child interaction, a closeness and love that families in the West often do not experience. Seldom is discipline necessary in the Chinese household; the parents seem able to set role models for their children at a very young age, and the youngsters respond in a most positive and pleasing manner. The Chinese children in Taiwan do not fear their parents; they do revere and respect them greatly and try to please them, particularly in their academic achievements as well as in music, dance, and sports. A Chinese father and mother have no greater pleasure in life than to see their son or daughter succeed in school and be admitted to a good university and career. One might speculate that a child will often subconsciously act out his parents' expectations and values. The children of China exemplify this phenomenon.

Whether a society as dynamic as modern Formosa's can have the best of both worlds--orderliness and traditions within the family configuration and at the same time economic development, social mobility, world inter-relatedness, and rapid academic climbing--is impossible to presage. The social anomalies related to youth that plague America, Western Europe, Hong Kong, and Japan may find their way into Taiwan and have a potentially deleterious effect on that society's amazing growth and development. Perhaps, though, the four thousand years of Chinese history which has culminated in the society that now exists in Taiwan can preclude changes that will threaten the better traditions and values of Chinese life.

Recent years have seen numerous changes come to the Chinese family in Taiwan. The father's authority has declined and now is seen as more moderate and reasonable. Yet, as Robert M. Marsh has observed in his important study, "The Taiwanese of Taipei," published in the JOURNAL OF ASIAN STUDIES (1968), the married couples of Taiwan are more eager, willing, and less resentful

in giving their parents a home and other financial assistance than in other developed nations of the world. They are also more inclined to request that their parents live with them and help with the child-rearing process. Conversely, parents are more likely to give continued financial aid to their children even after they are married and have completed their education. Unmarried children, irrespective of age, continue to live at home. There also appears to be a desire to maintain the traditions of a family such as ancestor worship and the signs of respect accorded older members of the bloodline and at the same time future and present-orientedness (not past-oriented as in traditional Confucian society) (Marsh, 1968, pp. 570-585).

The prolongation of the childhood experience and the integrity of the modern Chinese family in Taiwan meld to create a home environment and a national climate in which education is fostered. Parents, most of whom have been challenged by the competitiveness of Chinese education, understand the importance of the school as a means of upward mobility and self-actualization, and they make the necessary sacrifices to assure their progeny of an opportunity for success. The burdens placed on the modern Taiwan family are often severe; yet parents and children are willing to make the necessary personal, financial, and social adjustment to accept the challenge that the educative process presents to them.

11. BOOKS, READING, AND THE PROLIFERATION OF LITERACY

It is not known when the first printed book appeared. The process of printing, which had its genesis in the Orient, went through a long evolutionary period. Chops--small carved ivory or stone name seals--were part of the origin of the printing press. These would be used to affix a person's signature to documents, scroll painting, bills, or tax receipts. Also, the process of rubbing stone slabs which had been elaborately carved with important decrees or laws is part of the evolution of Chinese printing. The procedure required the copier to drop a piece of paper (another early invention in China) or silk cloth over the stone that had carved on it Chinese characters. The paper would then be inked and waxed and pressed with a brush or a soft roller on the stone, and the likeness of the character would appear on the paper. Wooden slabs could be used in this process also and allowed greater movement of the original source because of the significant lightness of this medium.

It was during the eighth century that the next step in the evolutionary process of printing began. Instead of cumbersome slabs of wood or stone, small wooden blocks (from one-half to one inch) with one or two words appearing in relief (in the mirror image) were developed. These were then placed in the proper order and organized in wooden boxlike frames. Each box filled with wooden Chinese characters corresponded to one Chinese page which, with ink on only one side and being folded in the middle, meant two pages in the Western style. The printed words were in black, while words from the rubbings of slabs had been in white on a black ink and wax surface.

Pages were then bound together with silk yarn. These became the first books made with movable type, and this invention allowed China to produce large quantities of books and have them distributed on a national scale. The whole Chinese Confucian classics and other works on such topics as the

Buddhist scriptures, medicine, dictionaries, poetry, or any subject that had mass appeal could now be produced quite easily and economically. Europe at this time was relegated to reproducing books through the time-consuming method of copying originals. This was done in the West by monks, many of whom would spend a lifetime on one or two volumes. Both government and private publishing flourished in China in the ninth century, and this trend of an abundance of printed materials in book, pamphlet, and brochure form has continued to this day.

Professor Dun J. Li quotes Shen Kua (a 13th century Chinese scholar) on how printing in the early ages of China was accomplished:

> Pieces of movable type are made of moistened clay, and on each of them is carved one Chinese character. The type is ready for use after it has been hardened by fire and thus made permanent. To proceed with the process of printing, a printer smears an iron plate with a mixture of turpentine, resin, wax, and burned paper ash. Pieces of movable type are then arranged on the plate in such a way as to reflect the text of a book to be printed. They are confined within the plate by an iron fence fastened tightly to the plate. . . . The plate is then placed on a gentle fire in order to melt the mixture previously described. A wooden board with smooth surface is pressed upon the type so that the heads of all pieces would appear on the same level. The plate is then ready for printing.
>
> Usually two plates are used when a book is printed. While one plate is in the process of printing, pieces of movable type are arranged and set on the other plate. When the required number of copies has been printed by the first plate, the second plate is ready. Thus the two plates change their role alternately (D. J. Li, 1978, pp. 242-245).

What the proliferation of books did to China would be hard to measure. Certainly one effect was the spread of literacy and the subsequent change in the composition of the ruling class. More persons now could study for the competitive national examination, and individuals from lower classes had greater opportunities to eventuate into governmental leadership positions.

Universal education did not come to China until the 1950's when the educational policy of Taiwan mandated that all children would attend school at least through the sixth grade.

Even today the Chinese on Taiwan have certain advantages in the field of learning due to the widespread availability of the book. As the distinguished Sinologist Dr. P. A. Herbert (1982) states: "I cannot help feeling that the chances of Chinese students, and Chinese people in general, to widen their educational horizons are increased by the refusal of the Republic of China to sign the Berne Copyright Convention. The 'pirating' of English-language books makes scientific and technical information cheap and easily available for libraries or private purchases." Books are reasonably priced in Taiwan, "so cheap educational materials are another feature which has marked Chinese education for the last thousand years" (Herbert, 1982).

The early development of the printing press in China and the subsequent spread of the book to all reaches of the kingdom not only influenced the quantity of readership, it also had a direct bearing on the educative process of Chinese youth. Most of what can be said about the relationship of books and the childhood experience historically is also relevant to youngsters today.

The book or printed page, unlike other forms of communication, makes certain requirements on the learner. Because China has traditionally on a per capita basis had many more books than the rest of the world and because the history of the printed book in China is almost twice as long as in the West, we may assume that certain cultural and social phenomena were influenced by this development.

When one is required or encouraged to read, one learns a peculiar way of behaving of which physical immobility is only one feature. This same statement may, of course, be made in the process of writing, particularly when one uses the calligraphic form of communication. Self-restraint is not only a challenge to the body but also to the mind. Sentences, paragraphs, and pages (be they read from left to right, top to bottom, or right to left) unfold slowly, are segmented in nature, and do not bring to the participant immediate gratification. In the reading process one must be patient while getting to the answer or the solution. While waiting for the conclusion of the issue or problem, one is obliged to evaluate the validity of the piece that is being read.

Reading separates the young from the old. It requires a complex and logical approach to gaining information from symbols, be they alphabetical or ideographical. Books require certain rules of behavior to be read, understood, and appreciated. The book not only separates the child from the adult, it also fosters in the child a need to defer gratification, to approach a problem with logic, to acquire a vast memory of words, punctuations, and symbols, and to remember them so as to garner meaning from what has been read.

China, with its historical abundance of printed books at cheap prices and its long history of formal organized educational activity, has had certain advantages over the West in the intellectual developmental process. It can be assumed that because China, Korea, and Japan have, since the eighth century A.D., been print-based cultures the concept of literacy as a cherished value has been possible. It allowed for an informational hierarchy to develop, it enhanced the examination system, and it made possible portable, non-oral transmission of knowledge throughout the empire. Linear and

sequential logic that is only found when one uses the printed page tends to foster and enhance the value and importance of the concept and need of education.

Complementing this is the Chinese language, which like the printed book has had a profound influence on the childhood experience in Taiwan and the intellectual development of Chinese young people.

Another important feature of the Chinese language is the general absence of concepts of "tense." It is impossible in European languages to form a sentence without a verb that places the sentence in a time context, e.g., present, past, future. Hence the action or state of being in the sentence is understood by the juxtaposition of words, e.g., the use of a key word that suggests when the action will occur or has occurred. In many Chinese sentences the suggestion of the tense by a key word is absent. The question then is how do Chinese when speaking know exactly in what time frame they are dealing. Linguists have come to realize that factors such as the overall structure must be considered if one is to truly understand the Chinese language and its absence of tense. A step further would suggest that the great degree of homogeneity among the Chinese population and the similar lives which so vast a collection of people have lived (and still live) might play a part in their communication skills. Subtle hints, such as body language, symbolic proximity, epistemological parellelism and precognitions, placing words in a certain order, or indicating key reference points that are universally familiar, all tend to contribute to the understanding in all languages of relative tense, but more so to Chinese, which is devoid of linguistic cases. It is not yet possible to judge fully to what extent the Chinese language relies on nonverbal or nonwritten signals, but there can be little question that the subtleties of the language far exceed what we currently know (Swanson, 1981).

Perhaps the Chinese language at one time in history had inflections, declensions, conjunctives, clauses, tenses, and moods. History, however, does not record these as part of the linguistic heritage. Some 40,000 characters make up the written Chinese language, though most people in modern Taiwan probably have a mastery of and use for only four to five thousand. The characters of today, which have evolved from pictures and portrayals of events, are highly complex and can explain virtually every thought, idea, mood, expression, and sense that other languages can. The use of overlays of the original primitive pictorial character has created a highly stylized written language that captures every nuance. Perhaps the clearest advantage to the ideographic language form is that it is absolutely separated from the spoken form, which allows peoples of different dialects to communicate in the written word.

Like the printing press that had a great effect on learning, the uniqueness of the written language of China has also influenced intellectual life and the childhood experience. The Chinese do not have an alphabetical system; in other words, letters are not put in a certain juxtaposition to form a word, and hence an idea. Great problems are engendered because of this, such as the use of dictaphones, typewriters, translation of names and foreign words, word processors, and anything that relies on alphabetical order for filing or other conveniences. Yet there are subtle advantages to the Chinese written language over the European and Semitic languages.

The written character to a Chinese represents an idea and not a word. It is essentially self-contained and, when put in sequence with other characters, it forms a collection of mini-ideas that creates in the mind a concept. The system of the use of ideographics is not totally unique to Westerners: our numerical system is, of course, idea and not sound oriented, and learning

numbers is no more or less difficult than learning the alphabet. Phonetic writing, which is currently in vogue in American education, is quite impossible in a pictorial based language. To acquire a strong language base requires sheer memorization of literally thousands of characters. No shortcut exists in this process; words quite simply cannot be sounded--or figured--out. Consequently in China, children who become part of the school system must follow the most fundamental of all ways to learn their language--memorization.

The same principles of learning language in China are applied to mathematical skills. Mathematics, incidentally, is seen by many as the purest and highest level of intellectual development. As Dr. Chor-Wen Tan, Dean of Cooper Union's School of Engineering in New York City, has suggested: "Chinese have a high regard for education and a gift for detail and precision that enables them to do particularly well in math. The traditional method of learning in China is memorization, for which there is still a place in mathematic study" (NEW YORK TIMES, 1982). Dr. An Wang, the Shanghai-American chairman of Wang Laboratories, carries the concept a step further when he suggests: "In the Chinese language there is the one-syllable character and Arabic numbers are also one syllable. Chinese may simply find it easier to read numbers and characters than words" (NEW YORK TIMES, 1982). There is ample evidence to suggest that Chinese do disproportionately well in the mathematic sciences; their language development, which in the learning process is much like acquiring and understanding of mathematical formulas and which is learned from early childhood, may contribute directly to this.

12. EDUCATION AS A FORCE FOR CHANGE: AN HISTORICAL-ANALYTICAL APPRAISAL OF PEDAGOGICS IN TAIWAN, 1950-1984

The educational experience in Taiwan has been a story of profound success. Educational expansion and opportunity have complemented the growth of the economic and industrial systems. It also is a potent force in laying a firm foundation for continuing Formosa's growth in social, political, and economic modernization.

In this next section, a brief narrative will show the current structure of education in Taiwan and how the system is attempting to meet the needs of both younger and older students and the intrinsic needs of an industrialized, expanding, and dynamic society.

Education in Taiwan has made substantial gains in the last 35 years. The only Asian society that can compete with Taiwan in educational vividity is Japan; yet the Japanese system with its "examination hell" and obsessive pressure on children to enter the right kindergarten and then the correct public school has created numerous psychological and societal problems that are perhaps neutralizing the high quality of learning and teaching.

Competition, examination, and conformity are also found in the educational system of Taiwan; they have, however, been minimized by two forces. The Chinese, because of their Confucian heritage, are more reflective and philosophical about success and failure than the Japanese; and education in Taiwan is a meld of the traditional draconian examination system and the more pragmatic, egalitarian, and liberal/progressive ideas of American pedagogical philosophy and psychology. This synthesis has created a system of which the people of Formosa are proud and supportive.

It has been suggested by David E. Apter in his important book, THE POLITICS OF MODERNIZATION (1965), that in a developing society education

a number of very important roles. It helps promote high literacy which in turn assists a society's technical and economic development; but, perhaps more importantly, it enhances the socialization and integration process by creating a common background and identity among the peoples and allowing them to join with the governing groups in a cooperative effort toward societal modernization. David Lerner in THE PASSING OF TRADITIONAL SOCIETY (1958) suggests that, as a society like Taiwan becomes industrialized, a natural phenomenon of expanded educational opportunity occurs. "Increasing urbanization has tended to raise literacy; raising literacy has tended to increase media exposure; increasing media exposure has /enhanced/ wider economic participation (per capita income) and political participation (voting)."

Education is of such importance to Chinese society and the political leadership of Taiwan that, unlike in the United States, the issue is addressed specifically in the Constitution. Expenditures, educational goals, and specific comments on the fiscal base of operation for all aspects of Taiwan education are detailed in Chapter 13, Section 5 of the National Constitution (which became effective on December 25, 1947). The provisions relevant to education state:

> Article 158: The nation's educational and cultural services shall have as their aim the development among the citizens of national characteristics, democratic spirit, traditional morality, good physique, scientific knowledge, and the ability to earn a living.
>
> Article 159: All citizens shall have an equal opportunity to receive education.
>
> Article 160: All children of school age, to wit, those from six to twelve years, shall receive free primary education. Those from poor families shall be supplied with textbooks at the expense of the Government.
>
> All citizens above school age who have not received primary education shall receive supplementary education free of charge and shall likewise be supplied with textbooks at the expense of the Government.

Article 161: The National, provincial, and local governments shall create scholarships to assist students of good scholastic standing and of exemplary conduct who lack the means to continue their school education.

Article 162: All public and private educational and cultural institutions throughout the country shall, in accordance with the law, be subjected to State supervision.

Article 163: The State shall pay due attention to the balanced development of education in different regions and shall promote social education in order to raise the cultural standard of the citizens in general. The National Treasury shall give cash grants to border regions and economically poor areas to help them meet their educational and cultural expenses. The Central Government may itself undertake the more important educational and cultural enterprises in such regions or give them financial assistance.

Article 164: Expenditures for educational programs, scientific studies and cultural services shall be in respect of the Central Government, not less than 15 per cent of the total national budget; in respect of the provinces, not less than 25 per cent of the total provincial budget, and in respect of the municipalities or hsien, not less than 35 per cent of the total municipal or hsien budget. Educational and cultural foundations established in accordance with the law shall, together with their property, be protected.

Article 165: The State shall safeguard the livelihood of those who work in the field of education, sciences, and arts and shall, in accordance with the development of the national economy, increase their remuneration from time to time.

Article 166: The State shall encourage scientific discoveries and inventions and shall protect monuments and articles of historical, cultural or artistic value.

Article 167: The State shall give encouragement or subsidies to the following enterprises or individuals:

1. Private educational enterprises in the country which have a good record;
2. Chinese educational enterprises abroad which have a good record.
3. Persons who have made discoveries or inventions in the fields of learning and technology;
4. Persons who have rendered long and meritorious service to the cause of education.

The Constitution has worked as a guide for educational development; however, due to political circumstances, the national government which is called upon to give 15 percent of the national budget has been unable to meet this provision.

There are various subjective methods of measuring the quality of educational experience. The schools in Taiwan are in excellent condition, discipline problems are virtually nonexistent, daily attendance is much higher than in the United States, and parents play a great part in the education of their children. The grounds are well-kept and graffiti are nonexistent. Children study aloud, and the respect afforded teachers is immediately evident. Parents are asked to review their children's completed homework assignments each night and then to sign a homework record sheet indicating that the work is done and is of an acceptable quality. Events at schools, such as music recitals, art shows, sports activities, and science displays, are attended very well by parents and grandparents (many of whom live with the family). Perhaps the best subjective factor is the way the children look and behave on the way to and from school. They are generally walking fast or hurrying to the public bus, a common and cheap means of travel to school (students are entitled to special discount tickets), and they inevitably carry with them a satchel filled with books, papers, and other materials. Some children are not much bigger than their homework satchels! Smiles are the most common expression seen on the faces of students. When one compares the attitude of most public school students in the United States with the feeling that pours out of the students in Taiwan, it is evident that most of these youngsters enjoy school and are able to internalize the relationship between education, family pride, and future social, academic, and employment success. One also notes in Taiwan that misbehavior, though present, is not dealt with as severly as in the U. S. schools. Parents are called upon to solve the problem. The school teachers and administrators do not see their role as one to enforce discipline. The parents seem to handle these problems in a variety of ways; the end result is that the difficulties that plague

U. S. schools do not exist in Taiwan. They are simply not part of the culture or social setting; and discipline problems, disrespect, and disruptive and uncontrolled behavior on the part of students are unacceptable. Incidentally, every high school visited had a statue or large painting of Confucius at its entrance or interior hall. The moral and ethical implications of this symbol represent well the general tone of the academic atmosphere that is developed. Respect, kindness, and cooperation are found in the public and private schools; discrimination, phasing, mainstreaming, truancy, poorly groomed teachers, and administrative rancor are enigmas to Chinese education in Taiwan. When the issue of discipline is brought up, teachers and administrators indicate it is never a problem. In the United States this area--classroom management--rates highest on the list of ills (1975-1985) as perceived and articulated by American pedagogues (followed by salary and professional recognition).

Objective criteria when applied to education in Taiwan also show the school system to have been successful. One of the major determinants of national educational commitment is enrollment trends. This next section will compare the year 1950 with 1980. Statistics are available for the year 1945 (when Taiwan retroceded to China) but, due to the problems of dislocation brought on by the war and the provisions of the peace treaty, 1950 appears to be a more meaningful time from which to measure quantitative change. It must be noted that to compare Taiwan with European or American education is quite impossible; to compare the Taiwan of 1950 with contemporary Taiwan (1984) is possible and plausible.

In 1950* there were 28 kindergarten centers with an enrollment of about

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*The population of Taiwan in 1950 was 7,560,000. In 1984 it was 18,515,754, an increase of 2.45 times.

17,000 students. By 1980 the number of students had increased to 151,290, and there were almost 1,000 kindergarten settings. This reflects an increase in pupils of about 800 percent over a 30-year period. The reason for the success of the preschool program in Taiwan is the result of economic opportunities for married women and the general attitudinal change about women holding jobs outside of the home.

The Constitution clearly defines educational opportunity in grades 1-6, which are mandatory, and grades 7-9, which are free and compulsory at this time. *In 1950 there were 1,231 primary schools on the island with an enrollment of 906,950. In 1982 there were 2,457 primary schools and the enrollment had reached 2,226,700. A major change came to the structural design of Taiwan education in 1968-69. At that time the public junior high school (also called at times the national middle school) was established. This gave children the opportunity to continue their education sans an entrance examination through grade nine. Before this, admission to the junior high school was predicated on the score of a national exam given to sixth graders. The number of public junior high schools today is 661, while in 1969 it was 487. The enrollment increased in this same 15-year period from 617,225 to about 1,100,000. It must be added that this extension was not without major economic and facility allocation difficulty. This will be looked at more fully in future chapters.

When one talks of secondary schools in Taiwan, a unique frame of reference must be employed. There are three types of secondary institutions:

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*Statistics for this section come from "Educational Statistics in the Republic of China, 1984," and Huang Ping Huang, Professor of Education at Chengchi University, "Modernization of Education in Republic of China Since 1949," Sino-European Conference, September 10-15, 1984, Taipei, Taiwan.

the academic high school, the teachers normal five-year school, and the vocational high school. The traditional academic high school consists of three years of intensive academic course work. Its intent is to prepare the able student for three objectives: (1) to pass the national joint entrance examination for college and university admission; (2) to give the student an adequate academic base from which to build his college education or his career; and (3) to develop social and moral attitudes conducive to a harmonious society. In 1950 there were in Taiwan some 62 academic high schools and about 19,000 students. By 1980 the number had increased to 185 schools with an enrollment of 179,000. Vocational school educational opportunity has likewise increased. There are some 200 vocational schools today with an enrollment of over 325,000. This reflects an 800 percent increase in the 30-year period under study. Today (1985) in modern Taiwan there are approximately 5,740,000 students in all levels, or about 27 percent of the island's total population. Only the United States has a greater per capita percentage of students. No other nation can match this high level.*

One of the unique facets of higher education in Taiwan is the teacher education institutions (called normal schools or normal universities). All of these schools were established by the government and offer free tuition. The period of study is five years; this includes a year of practice teaching. Upon graduating from a normal school/university, the person must teach for a period of time in a location, field, and level determined by the government

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*Approximately 60 percent of all children 16-20 are in high school (academic and vocational; 98.6 percent in junior-middle high schools; and 99.79 percent in grades 1-6. Higher education of one type or another enrolls some 45 percent of men and women ages 20-24.

(which has covered tuition cost). Young people in the provincial public education system benefit greatly from this government-controlled policy in that rural areas, as well as urban, can expect to have highly qualified and nationally certified teachers. The discrepancy between rural and urban educational quality is hence, in theory, minimized by the government's using a central placement service to determine which schools or areas are in need of more science, mathematics, art, music, social studies, or special education teachers. (For a detailed discussion of teachers colleges, see D. Smith, IN THE IMAGE OF CONFUCIUS, 1983.)

In Taiwan, there are three types of junior colleges. There is the five-year model (three years of high school followed immediately by two years of college), the three-year post-high-school junior college, the five-year junior normal school for the preparation of elementary teachers, and the two-year junior college. As the enrollment in the public school system has increased, so has the total enrollment figure for the various types of junior colleges.

At the peak of the educational system are the public and private colleges and universities. These are available only to students who have done exceptionally well on the National Joint Entrance Examination offered each summer. In 1950 there were only three colleges, one university, and a few junior colleges and research centers. The total higher education student enrollment was about 6,600. The number of institutions of higher learning is now over 100, representing an increase of 13.43 times in the 30-year period. An increase of 46.59 times the number of students was also registered. The students in all higher education institutions as of 1984 numbered approximately 395,130. Of this number 130,000 are in B.A., M.A., or doctorate level programs.

The policy of Taiwan is to encourage vocational education and to bring prestige and recognition to technical and vocational professions. In 1975, approximately 55 percent of those attending higher education were enrolled in academic high schools, while 45 percent went on to technical vocational schools. In 1985, some 70 percent of the population ages 18-22 are in vocational, professional, and technical tertiary education. Only 30 percent are attending the academically oriented degree programs. It is felt by the educational authorities of island China that the strength of that society depends on a well-educated technical labor force and that employment opportunities are enhanced when limits are placed on purely traditional academic programs.

As has been stated, entrance to institutions of higher learning is based on successful completion of an academic high school and passing the Joint National Competitive Entrance Examination. Once a year, in mid-summer, all institutions of higher learning hold joint entrance examinations to select freshmen. These examinations (even in the eyes of those individuals interviewed who were dissatisfied with higher education in Taiwan) are open to all, competitive, and fairly graded. Utmost scrutiny is used in grading, and there is no indication of favoritism or dishonesty in this process.

Before 1984, when registering for the national examination (which is held in late summer at numerous conveniently located sites), the applicants would list both the fields they would like to study and the institutions they hoped to attend. A new policy instituted in the summer of 1984 allows the student to take the examination first and then, based on advisement and also on the relationship of previous years' scores and the placement potential a person might have, to select the school he wishes to attend. Educators indicate that this precludes artificially high expectations for admission and, consequently, produces a more realistic choice in subject areas and

institutions. In the following chapters, the new examination and its relationship to the high school will be explored.

One would wonder how students who did poorly on the exam would be motivated to study diligently in an area that was, for example, choice 50, school 10. The answer was given to me quite clearly by a sociology professor at Tunghai University: "Out of the 100,000 who took the examination in 1983, only 30,000 passed it and were admitted to college. Hence, 70,000 students would gladly replace anyone who was unmotivated." Further, as was explained to me by a dean at National Normal University in Taipei: "Few high school students really have any idea of what they wish to major in. Once they are in the department, they normally become quite enthused with the challenge and subject matter." To support this thesis, one need only to look at the graduation rate of students. Approximately 93 percent of students who are admitted to one of the universities in Taiwan graduate with the baccalaureate degree in four or five years. In America, most high school graduates can get admitted to some college (about 50 percent elect to go); yet only approximately 37 percent of these (1971-78) graduate in the four- or five-year period. One could say that, because of the strict and competitive admission policy of the Ministry of Education, the most talented students are accepted. These quite naturally should graduate and do. Transfer from one school to another is very rare; transfer from one department within a school to another is less rare but does necessitate approval by the Ministry of Education (which reevaluates the student's examination performance). The better private colleges and universities in the United States also practice highly selective admissions policies and also graduate a very high percentage of their freshman classes. Schools like Harvard have a retention rate of over 80 percent. The strict criteria for acceptance seems to translate into a higher retention capacity.

The most prestigious degree that can be earned in Taiwan is the Ph.D. (the Ed.D. is not available). Only a few of the better schools have been granted permission by the Ministry of Education to offer these programs. The doctorate, it might be noted, is not traditionally granted by a university; rather, it is awarded by the national government upon recommendation by a university. Evaluation of a student's educational standards is made by a committee from his school and other scholars selected by the Ministry of Education. The theory is that the doctorate transcends university limits and should be considered a national degree. This is in keeping with Chinese history. Historically, the Emperor alone had the power to bestow the higher degrees on a successful candidate. The doctorate normally is earned after the master's and generally is a three- to five-year program in residency and is research oriented, as are most Ph.D. programs in the United States. The most prestigious school in Taiwan, National Taiwan University in Taipei, offers the doctorate in more than a dozen fields. This university, which began during the period of Japanese administration, can be ranked as one of the finest institutions in the world. Its medical college is internationally respected, and physicians from many nations visit it for training and to teach.

The Ministry of Education assures that all graduate degree-granting programs have strong faculties and available research material. Most of these schools have only one or two Ph.D. degree programs; many universities offer numerous master's degree programs. These also must have approval of the Ministry of Education, as must all new departments, new faculty, and curriculum revision. As a high official at the Ministry of Education stated: "We do not want to have a marketplace where highly educated men and women cannot find employment. Rather, we control the number of persons gaining

degrees and, consequently, assure fuller employment at the level of a person's education."

Institutions of higher learning have had a continuing problem of attracting the best and brightest professors. Until the early 1970's a serious "brain drain" affected higher education. Many young people who took the terminal degree or postdoctoral work in America remained on the faculty of this nation's colleges and universities. Though the Ministry of Education recognized this as a serious liability for its own system, no effort was made to limit the movement of people. China has a history of emigration. Interestingly, over 30 million Chinese live outside of China. The so-called brain drain, which did in the statistical sense hurt the academic profile of teachers in Taiwan, ended in the early 1970's when nations like the U. S. and Japan found that the 1960's had produced an overabundance of Ph.D.'s to teach in their colleges and universities. Consequently, Taiwan today is not only attracting the best and the brightest of its own Ph.D.'s but also has thousands of inquiries from foreign professors seeking teaching positions. Taiwan does have a basic rule: The college professor who hopes to become part of the regular (as contrasted to visiting) faculty must have fluency in Mandarin Chinese, the language that is used in all colleges and universities. However, visiting professors may be hired from other nations; all college students speak, read, and write English; and most graduate students have proficiency in a third or fourth language (usually Japanese, German, and/or French).

The main accomplishments in education since World War II have been in professional training. Virtually all physicians (the term "doctor" in China always denotes a Ph.D.), engineers, lawyers, teachers, and most scientists have received their education in Taiwan. Scholars in the humanities and social sciences usually take their terminal degrees abroad in Japan, the

the United States, France, Germany, or England. Yet, with the significant improvements made in the Taiwan faculty since 1970, more students are remaining in their homeland for their graduate liberal arts education.

If one attempted to rate the universities in Taiwan in terms of quality, three would head the list: National Taiwan University, founded by the Japanese in 1928 and today considered one of the finest institutions in the world, National Chengchi University, and National Taiwan Normal University. The last school mentioned, a teachers college, has numerous visiting scholars and has successfully synthesized modern methods of teaching with classical Chinese scholarship. Competition for admission is extremely hard at these schools.

Higher education institutions show neither sex nor ethnic discrimination in any program. In some areas women tend to outnumber men, particularly in education. In the sciences, men tend to have a slight edge. In the medical sciences, it is fairly equal; but in law and engineering, men tend to dominate in terms of numbers. Legally, discriminations based on sex, race, and origin are taboo; and one senses that legal status of all persons, be they mainlanders, Taiwanese, Hong Kong residents, aboriginese, or foreign visitors (numerous Japanese and Koreans come to China for their education), is on an equal basis. Such things as quotas do not exist; the national entrance examination does away with subjective admission practices. Some preferential treatment is given to diplomats' children who have been living overseas and to sons and daughters of war heroes.

Education administration in Taiwan differs significantly from the system of governance at the national level in the United States, yet it does not significantly differ from the methods used by many state governments to administer schools and universities. Nor does it differ radically from the French, Swedish, German, or British systems.

At the top of the pyramidal chart one finds the Executive Yuan (cabinet), which as a group has the responsibility to administer the social, economic, military, judicial, educational, and policy-planning needs of Taiwan. The men and women who head the Yuan are the leaders of the various executive departments and also have advisement and staff responsibilities to the President and the Premier. They have line authority for their ministry. The executive department that deals directly with universities and colleges is the Ministry of Education. It would remind one of a state Board of Governors or Regents rather than the U. S. Department of Education, which has only peripheral influence on U. S. institutions of education.

The Ministry of Education does have a great deal of power and in reality sets the tone of Taiwan education. The Minister, appointed by the nation's chief executive, takes overall charge of his department. He or she is often a former college president and is knowledgeable about academic life. Needless to say, his politics are attuned to those of the government. He is assisted by one general vice-president and two administrative vice-ministers. Housed in the Ministry are seven departments, five bureaus, three offices, and numerous committees. The Ministry has final say in numerous matters, including hiring and dismissal of professors, promotion, retention, admission of students, administration of the national exam, textbook ordering, publications, department size and degree offerings, teaching materials, cultural programs, building needs, scientific betterment, and administrative appointments at all public colleges and universities. It also works as the authority of final resort in all professorial and student appeal cases. Occasionally, students who are dissatisfied with some aspect of their education (e.g., an incompetent or unethical professor) will petition the Minister of Education. According to both teachers and students, these appeals are usually

investigated and, if the students have a legitimate complaint, corrective action is taken. Normally, however, the system of appeal is through the departments, deans, and the school's presidential appeals committee (made up of professors, administrators, and students) rather than to the Ministry of Education. The system, though highly structured, is flexible. Most of the people in the Ministry of Education have advanced degrees and come from academic life. They, therefore, have had practical experience in schools and colleges and have themselves been students and understand the problems of teachers and pupils.

The Provisional Commissioner of Education of Taiwan Province is responsible for all affairs of the department with a Deputy Commissioner to help him. Under the department, there are six divisions and five offices to handle the promotion and supervision of educational matters in the Province; four institutions, one stadium, one symphony orchestra, and one bookstore taking care, respectively, of the collection and exhibition of cultural objects and publications, the promotion of social activities, the printing of textbooks, and the in-service training of elementary school teachers. There were nine junior colleges in 1982, 139 secondary schools, eight experimental elementary schools, 61 supplementary schools, and five special schools under the jurisdiction of the Department in 1981.

The Director of the Municipal Bureau of Education is in charge of Bureau affairs, with a Deputy Director to help him. There are five divisions, five offices, and one committee in the Bureau to take care of the promotion and supervision of educational affairs in the city. Under the Bureau, there are libraries and institutions to handle the collection and exhibition of books and social educational agenda.

The Director of County/City Bureau of Education of Taiwan Province takes charge of all matters pertaining to the Bureau, assisted by a secretary.

Under the Bureau, there are five sections and several inspectors to handle the promotion and supervision of county educational activities.

The source for the above outline of duties, relationships, and responsibilities is the booklet, "Education in the Republic of China, 1981" (Ministry of Education, Taipei, 1982, pp. 12-18).

With this sophisticated centralized management and administrative system, the values of Chinese civilization and history, the high ideals expressed in the Constitution of 1947, and the attitude that the people of Taiwan hold toward the need for centralization of their government structure are being realized.

In summary, traditional education in Taiwan--kindergarten through the postdoctoral study--has expanded dramatically in the last 30 years. One of the major goals of any public educational system is to develop in the populace an acceptance of their society, its political institutions, and the economic system. It is felt that through an understanding of these institutions, which are the foundation of a harmonious community, members of the group will have a greater chance to live in comfort, economic and social security, and future-orientedness.

Mandarin is the language of instruction in the school system of Formosa. Taiwanese (and Hakkanese, to a much lesser degree) is the language spoken in the playgrounds, streets, and homes of 90 percent of the population. Youngsters today are fluent in both Mandarin and Taiwanese; and the post-1949 Chinese and the pre-1949 Chinese (commonly called Taiwanese) have, in all but the most isolated regions and islands, an equal opportunity in the educational system of Taiwan. Each year the percentage of persons in Taiwan who were born on the mainland decreases and, in the not-too-distant future, the island will consist of virtually all native Taiwanese-born Chinese. Research

conducted by Sheldon Appleton in 1970 strongly suggests that students of both mainland and Taiwanese ancestry have similar attitudes toward government, family, and other vital institutions in Taiwan society. Other researchers have come to basically the same conclusion. Interestingly, they have also found that in Taiwan a direct relationship exists between one's educational achievement and one's support for the institutions of the society. Generally, the educated class has such a vital interest in the nation's success that they perceive rancor as disruptive to their personal good fortunes. Debate over policy issues in education is often heated, but the extension of this Socratic exercise seldom moves beyond the tea circle of seminar rooms.

The modern educational setting in Taiwan differs from what is found in America, yet the goals of the system--to educate young and older students to their fullest potential and to develop a cadre of leaders in all fields to lead and work in the society--are consistent in both societies.

PART II

CONTEMPORARY ISSUES AND THE CHINESE HIGH SCHOOL IN TAIWAN

13. THE TAIWAN HIGH SCHOOLS: A PREFACE

Secondary education in modern Taiwan includes three kinds of schools: the general academic high school, the five-year junior normal/career college which is entered after the ninth grade, and the vocational/technical school (some three and others five years in duration). The secondary school is both the tertiary level of education for many students in Taiwan and, for others, the connecting link between primary education and higher education. In 1968, when the junior high school was made available to all youngsters who had completed the sixth year of education, that level of education (which had traditionally been quite academic and elitist) became a continuum of the elementary/primary educative process. The senior high schools were given the responsibility to develop the student's competitive, academic, and social instincts, to teach the student to think analytically, and to develop the resources of personality and citizenship.

This study will focus almost exclusively on the academic senior high schools in Taiwan, which number 176 in 1985 and show enrollments of 190,214. In 1950 there were 62 high schools, with a total enrollment of 18,866. The large increase, complemented by an equally significant sophistication of the academic environment of the high school, is noteworthy for those of us who are troubled by the current happenings in American education. If one takes time to look at the modern high school in the United States and reflect on the paucity of academically and intellectually stimulating content in the average day of the average high school student, one must have abundant reason for discouragement. American education, particularly at the high school level, is placing the vital interest of this country in jeopardy; and only through a renewed effort to centralize education under a governmental agency (similar to the autonomous Federal Reserve Board) can we hope to bring

about the revitalization of our school and make the necessary national economic and human investment in the future of our society.*

This essay on the Chinese high school in Taiwan delimits itself to the academic high school. Though the vocational high school is of equal interest and importance, time and space limitations preclude a detailed discussion of that subject at this time. For a detailed discussion of the junior normal five-year teachers college, please see the author's book IN THE IMAGE OF CONFUCIUS (1983).

In doing the field-based research necessary for this type of project, a number of questions were asked of persons involved in the educative process in modern Taiwan. Fifty-seven interviews were held over a seven-week period. Included in these were discussions with university professors and administrators, principals, high school teachers, counselors, functionaries of the Ministry of Education and the Provincial Department of Education, college students, high school students, recent high school graduates, and parents. Materials supplied by the Ministry of Education and the Department of Education for Taipei City, as well as literature available in the numerous libraries in Taiwan, were also of great value, as were unpublished dissertations that addressed the general issue of education in Asia. All sources used and all interview citations may be found in the bibliography of this book. In certain cases, students (out of shyness) requested that their names not be included. I have respected their request for anonymity.

Prior to leaving for Taiwan, a list of questions and concerns was developed and was used as the main vehicle for all of the interviews held.

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*For a better understanding of American high school education today, please see: National Commission on Educational Excellence, "A Nation at Risk" (Washington: 1982); Ernest L. Boyer, HIGH SCHOOL: A REPORT ON SECONDARY EDUCATION IN AMERICA (New York: Harper and Row, 1983); "Teaching in America," THE WILSON QUARTERLY, VIII, No. 1 (January, 1984); ad infinitum.

to orient the reader to the process of gathering information in the interview setting, the list of questions is presented at this time.

Questions Asked of Educators/Students/Parents

While in Taiwan (September-November, 1984)

1. What historical, social, and cultural factors in Chinese life have helped form the modern academic high school?
2. Describe the admission criteria and procedures to the academic high school in Taiwan.
3. How are junior high school students prepared and what examinations must they take to be accepted at the academic high school?
4. Describe the curriculum at the high school level.
5. What teaching methods are used in the different courses offered?
6. How are students quizzed in their classes?
7. What involvement do parents have with the school?
8. Define student/teacher relationships.
9. What are the discipline problems at the high school level?
10. How are students motivated?
11. What are the expectations of homework?
12. Are there differences in learning outcomes with children in the different classes in Taiwan?
13. Discuss the Joint College Entrance Examination.
14. How is the modern high school viewed by the public?
15. Discuss the preparation and standards for the teachers in the Taiwan high school.

It was from these questions and ensuing discussions that most of the information for this section was developed. Statistical material and graphs came from printed sources and are accordingly footnoted.

Though the interview was the main agent in the field-based research for this study, on-site observations of the high school setting, children and teachers interacting, and the physical facilities of the school setting have also played an important part in the development of this project. Schools in all areas of Taiwan were visited, as well as high schools on the islets off the coast in the Formosa Straits. A total of 15 high schools were visited by this writer on his 1982 and 1984 sojourns in Taiwan.

The academic senior high school in Taiwan separates compulsory education, grades 1-9, from the highly competitive and selective college and university education system. It may be seen as a bridge between these two extremes. In Taiwan, the high school is that phase in the educative life of young people when their career potential is determined, their chances for success via the conduit of academics is established, friendships of lasting importance are developed, and intensive and sophisticated learning, study habits, and examination skills are all demanded. The high school in modern Taiwan is a place of fierce competition--not between and among classmates--but between the individual students and the educative process they are required to accept and endure. Academic Darwinism prevails in Taiwan, not to the same extreme as is found in modern Japan, but at a level of intensity that is unknown to high school students in America and most of Europe.*

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*A term that may be used to define the competitive setting of the modern high school in Taiwan is "Academic Darwinism." Darwinism can be defined as a theory of biological evolution suggesting that species develop through a process of natural selection and elimination of variations which increase the organism's ability to survive. Implied in this theory is that only the most able and capable will be able to accept the challenges of the environment and be fit enough to survive and prosper. Academic Darwinism is the process which places persons in an educational setting that calls upon them to compete with the demands of the environment in order to survive, prosper, and endure.

Modern high schools have a variety of subtle and necessary functions that work to promote stability and social harmony in Taiwan. They work as a social melting pot for children of various backgrounds and assure all of them an equal opportunity for success or failure; they bring about an acceptance of the political, economic, and social status quo; and they help mitigate against political unrest and cultural alienation and estrangement. Also, the high school is a place where "mainlanders" and "Taiwanese" develop the same attitudes toward the institutions of their society (at the elementary level, the neighborhood schools are quite often dominated by either Taiwan or mainlanders, while the high school is a true melting pot of all of the ethnic and linguistic groups that make up Chinese society in Taiwan). The secondary school imparts a sense of pride in being Chinese and having a recorded heritage of over 3,000 years. Each of these topics will be addressed as this essay progresses.

Upper level education in any society "is the process by which society ensures the transmission of knowledge, skills, and values for the survival of the next generation, hence ensuring the continuance of its group life" (Ignas, 1981, pp. 234-236). High school education as found in Taiwan can also be viewed as an instrument of social policy, as an important tool of economic investment, and as an element in personal development and self-actualization. Tertiary academic education's function in a developing technological and industrial society such as is found on Taiwan subsumes a number of goals, explicit and implicit, subtle and overt, which include (1) social, (2) individual, (3) political, (4) psychological, and (5) cultural.

Secondary education in modern Taiwan functions in a social method in that it inducts the youngster into the society by providing him with a

collective experience of the nation and civilizations past, thus encouraging him to make a more effective contribution to the group. In China, where the group and not the individual is seen as most important, the conformity in dress, study patterns, behavior, and social life all reinforce the concept of the individual as part of a larger group which requires set patterns of behavior and collectively oriented mores of social interaction. It should be noted that the subsuming of the individual socially to the group does not appear to have an adverse effect on the creativity of high school students. The arts are emphasized at the high school level. Virtually all students participate in some form of group or individual creative expression such as dance, music, arts, or athletics. The Chinese high school in modern Taiwan requires social conformity of individual behavior; at the same time, it enhances the opportunity of the individual to develop and foster his talents and gifts.

The modern high school experience ideally enables the student to develop to the maximum his individual talents, which enable him to enjoy more fully the life of a successful, enriched person. Yet he is always made aware that his place in society is subordinate to his family, his school, his province, and ultimately his civilization.

Though the high school is seldom seen as a political institution, realistically, all governmentally sponsored or sanctioned organizations and activities do have a political role. In the modern high school in Taiwan, political socialization is most evident by the learning and experiential outcomes of the children. Political teachings as might be found in other Asian, Eastern European, or African nations do not exist.

Two writers have explored this topic in detail, Richard W. Wilson and Sheldon Appleton. Wilson concludes that the high school experience works

as a vehicle to induct youngsters into the political and cultural mainstream of Chinese life by encouraging them to replace the loyalty that they traditionally held for the family unit with loyalty to the large family of Chinese nationalism. As Wilson states, "The attempt today is to transform the particularistic relationships that characterize small groups into broader, more universal ones, yet the enotional content of the older particularistic relationships is not readily changed" (1970, pp. 43-73).

The academic high schools in Formosa encourage group activities, group spirit, group support, and a sense of belonging. Teachers and administrators become "temporary parents" for their charges--they are concerned about clothing, hair length, health, the child's daily life at home, his potential for the future, and other topics that are, in the West, considered the exclusive purview of parents and, to a lesser degree, religious organizations. Respect, similar to that which is expected to be given to parents and grandparents or one's minister or rabbi, is at the high school given to the teachers and principal. School authorities believe that this experience is important for the child in helping him move his emotional loyalties to a larger group than his family and friends. Paternalism best defines the relationship of the academic high school to its charges.

Various symbols of the Chinese nation-state are also found in the modern high school. These are to encourage pride and a feeling of belonging to the flow of Chinese civilization. No school is without a picture of Dr. Sun Yat-sen, a national flag, and a morning ritual of patriotic, Sinophilic lectures and music. Within the school setting, attempts are made to create a social setting not dissimilar to what one ideally would find in Chinese society. Class leaders, who are elected by their peers, have influence throughout the school. Numerous small clubs exist, and virtually all students hold some office of leadership and responsibility.

Ultimately, the group leaders do report to the school authorities, who become symbolically the national leaders in this microcosmic societal setting. Principals and teachers are eager to accept the role of "parent" for their students. Wilson quotes one instance that shows how intensely the relationship of the teacher or principal becomes during the high school years: After a traffic accident in which some students were injured by a bus, the principal stated to the parents, "I feel that your children are my children, so what has happened to you is just as if it has happened to me" (Wilson, 1970).

Political attitudes and psychological orientation of high school students in Taiwan are both part of the implicit mission of the academic high school. One of the main issues that has faced Taiwan is related to the variety of Chinese linguistic groups that live on the island. China is a nation of provinces, each of which has a separate dialect and distinct history. In Taiwan three linguistic groups tend to dominate: Taiwanese, Hakkanese, and Mandarin. The Taiwanese and the Hakka have been on island China in positions of dominance for some 200 years; mainlanders, who generally speak Mandarin, came during the post-World War II era. Initially, there was a degree of rancor between the Taiwanese and mainlanders; however, over the past 40 years, this has all but disappeared. Research done recently suggests that the psychological makeup of both Taiwanese and mainlanders is essentially the same; that marriage between the two groups is common; and that the government, which was generally dominated by mainlanders, is now actively seeking Taiwanese officials to lead the government. The current Vice President of R.O.C., Dr. T. H. Lee (who earned his Ph.D. at Cornell), gives evidence of the efforts of the central government to integrate at the highest levels Chinese of all linguistic groups into positions of national leadership.

Chinese do have a strong sense of provincial sentiment. It is normal for two Chinese meeting for the first time to discuss in detail their families' ancestral community and to speak with pride of their provinces. Today in modern Taiwan, most of the social divisions observed in the 1950's and early 1960's have been almost totally eliminated. A number of important factors have contributed to this, and the academic high school and its programs have played no small role in this process. The school has done an excellent job in teaching Chinese Mandarin (Kuo yu) and, as a consequence, both mainlanders and Taiwanese speak this language. Many mainlanders also have learned Taiwanese to help them in their business dealings. The languages are used side-by-side in recreation; at the academic high school, Mandarin is the accepted language of instruction, for it is the national language of China.

The high school also works as a social setting for both Taiwanese and mainlanders to become close friends and confidants. All of the children have the same challenge: to succeed in their academic endeavors and to eventuate to the academic university. This common mission, which instills fear, frustration, discontent, and elation, binds the various linguistic groups together and precludes the concerns of ancestral provenance.

High schools are the preparation grounds for college, and at college most Chinese men and women meet their future spouse. Intermarriage between Taiwanese and mainland families is quite common and always accepted. This trend is related to many factors, but the high school and college must be considered as important.

Sheldon Appleton, who has investigated political and social attitudes of the Chinese on Taiwan, indicates in his dated scholarship (1970) that "a very substantial degree of social division [exists] between mainlanders and Taiwanese" (Appleton). In the 1950's and 1960's when Professor Appleton was preparing his excellent reports, this was perhaps true. The situation

today, however, is best summed up by Wilson when he states: "The general overall similarity between mainlander and Taiwanese children [high school age] with regard to both politically relevant and specific political attitudes is quite marked and of sufficient strength to suggest that mainlander and Taiwanese groups both have continued to adhere closely to political cultural norms despite their separation during the first half of this century" (Wilson, 1968, pp. 992-998).

Observations and discussions by this writer of and with high school and college students suggest that the greater degree of success one has achieved in the educative system of Taiwan the greater his support for the agencies of government and his desire to maintain the political and social status quo. Unlike other Asian nations (e.g., the Philippines, Japan, and Korea), education in Taiwan brings about a psychological predisposition to support governmental policies and to foster the position of the current regime. (Conversations with well-educated Taiwan mainlanders suggest to this writer that they are eager to have the opportunity to meet with long lost relatives who were unable to be part of the exodus that took place in 1945-49. This suggests the enduring strength and loyalty of the Chinese family even in the face of the adversity that has kept many relatives from seeing each other.)

High school education plays a vital role in the induction of Chinese students into the cultural life and milieu of China. There can be no doubt that the public and private schools still very much have their roots in Confucian traditions. Herein is found the central theme of the educative system, and herein is found the specific direction for curriculum planning and implementation.

One of the productions of the secondary academic school is a most thorough development of an aesthetic sense among the Chinese people of Formosa. As W. G. Goddard points out in his study FORMOSA (1966):

> Among the Chinese people, more than among any other people in history, the poet and the painter, rather than the politician, have been the true guide to history and the march with destiny. In his essay on the poet-painter [a common combination in China] Cheng Man-chung, Chang Chi-yun had said that the artist was the true interpreter of Chinese culture in the past and would be the most successful missionary "in spreading Chinese culture overseas and making known the spirit that has been alive in Chinese culture for thousands of years" (p. 199).

While in the West religion has been the foundation of cultural development, for the last 2,000 years China has developed its cultural legacy in a purely non-religious method. The cultural life in the high school stresses the great art, music, and literature of China's splendid past; but it does this, not as an end in itself, but rather as a device to introduce Chinese children, who will lead their society, to their cultural past and to develop in them a strong sense of Sinocentrism. Chinese have long viewed their cultural legacy as superior to that which is found in the rest of Asia or, for that matter, elsewhere in the world. Logic would hold that, if one does perceive his society and its cultural base as superior, the individual will develop an identity with this cultural legacy and be eager to share his advantages with persons less fortunate. Chinese high school students are taught to admire and respect their cultural past and, because the cultural attributes of China are superior, that one should quite naturally accept them for one's own value system. The result is that the symbols of modern culture and those of China's past are seen as one, and the students quite naturally accept the current cultural, social, and political pattern as superior and relevant to the world in which they live.

In many societies this purposeful process of actualization of children by schools would bring about an unhealthy nationalism and, perhaps, cultural chauvinism; the Chinese students, however, appear able to view their civilization's protracted and splendid past in a distinctively healthy perspective.

As was previously mentioned, the high school has as its primary agenda the education of young people for advanced university and college study and to help them develop attitudes and values that will assist them in their careers and their lives. Yet a less obvious objective of the high school is found in its mission of bringing about a set of socially desirable attitudes toward society and oneself. These, as has been shown, are in the areas of social, individual, political, psychological, and cultural attitudinal development.

14. CHINESE TERTIARY EDUCATION: AN HISTORICAL PERSPECTIVE

The historical foundations of the Chinese high school in Taiwan and the development of the theoretical pedagogical base on which it rests span a period of over one hundred years. Though this is a short phase in Chinese educational history, which can be traced back for some two thousand years, it does suggest that China's concerns with formal high school education developed concomitantly with those in the West and Japan.

In most social and cultural developments, China historically has led the way. However, in the area of high school education, the Chinese civilization borrowed much of the theoretical and structural nature of its tertiary schools from other nations.

It was during the last years of the Ching Dynasty (1644-1912) that the high school began to emerge as a major education development in the Chinese Empire. It may be said of the mid-19th century that education in general became more involved with problem solving and less concerned with rote memorization, while at the same time retaining the philosophical idealism of Confucianism. A series of humiliating military defeats brought to Chinese intellectuals the realization that new educational programs and schools were necessary if the middle kingdom was to survive and move, as a unified nation, into the next century.

Professor Chyu, Li-Ho, the distinguished educationalist and writer at National Taiwan Normal University in Taipei, suggests that China went through a number of distinctive phases in its development of the high school. The first phase was initiated in the mid-1860's when China attempted to bring in an era of "New Education." Secondary school teachers were invited from Germany, France, England, and Russia. Their presence in the middle kingdom had an influence on educational thought. Most of these pedagogues were associated with church schools; no major national education policy emerged. Yet, for the first time in China's protracted educational continuum, foreign concepts and ideas of science, ethics, religion, and language were introduced.

In 1905, the traditional examination system was ended by imperial edict, and education then began to undergo significant responses, primarily due to the nations that were challenging China's very existence. Japan--which had gotten virtually all of its social and cultural institutions from China (and later from Western societies)--appeared to be the logical model for Sinica to emulate in its development of the high school. Many Chinese educators during this era were going to Japan to take their primary and advanced degrees. Hence, the first nation that China looked to for guidance in developing its new high school system was Japan. The Japanese high school

educational paradigm in the late 19th and early 20th centuries was highly conservative, centralized, and emphasized in its curriculum the classics, history, poetry, geography, the sciences, and morals. Nationalist indoctrination was also a major part of the Japan model that was adopted in the early 1900's by China, as was the Confucian principles of blind loyalty, filial piety, and the positive and negative aspects of ethnocentrism. During this phase the Chinese high school abandoned most Western concepts of democracy and purposely limited foreign learning to technical matters and concepts of scientific development. Chinese values were emphasized, and China went through a period in which a necessary pride was taken in her heritage. One might suggest that this "Asian phase" of the Chinese high school was a necessary and healthy reaction to the abuses leveled against that civilization by the Western intruders of the 19th century.

The Japanese interlude lasted from 1895 to 1908. In Taiwan, which became Japan's first imperial territory, the educational policies and practices remained Japanese until 1945 when China expelled Japan from the island of Formosa.

Professor Chyu, Li-Ho suggests that the next stage in the development of the Chinese high school was modeled after the German Experience. This period can be dated 1908-1918. During this time, Germany was recognized as the leader in educational development. The German vision of the high school was that it should be a place of orderly learning, hierarchal in nature and elitist in mission. High school education in China at this time focused on developing reliable and responsible workers on the one hand and, on the other, selecting for special academic training those young men who appeared most gifted. Emphasis in the classroom was on self-discipline and the encyclopedic view of learning. Children were seen as functionaries

of the state and, as such, were given special privileges by all members of Chinese society. Vocational education, teacher education, and traditional academic education were the three modes available to the more fortunate Chinese young people.

Germany's defeat in 1918 ushered in a new phase of educational development in China. (Professor Chyu, Li-Ho dates this period from 1918 to 1930.) It is appropriate to look at this most important stage, which more than any other has led to the philosophical and structured nature of the modern high school in Taiwan. As was mentioned earlier in this study (see section on John Dewey), a number of American educationalists visited China in the early 1920's. John Dewey was the most important, and he carried with him the ideals of progressive-democratic education as was being introduced into American high schools. Basically, Professor Dewey believed that the school should be a microcosm for life: If democratic principles were practiced at school, they would be then introduced more easily into the society as a whole. Dewey further emphasized the need to have the child's place as one of central importance in the classroom. Perhaps Dewey's main contribution was his concept of "learning by doing." By this he meant that, in order to appreciate fully the material covered, the child should search for his own conclusions, be they in science, writing skills, or group relations. Dewey believed correctly that self-discovery played a major role in intellectual development and learning transfer, e.g., if the classroom was group oriented and peer group relations were gentle, this would influence national policy when the high school student took his place as a leader of his society. Numerous Chinese scholars became disciples of Dewey, including Hu Sheh and Chiang-Monlin; and their influence and the ideals of the American educator John Dewey were to have a profound impact on the high schools of China.

Today in Taiwan much of the educational thought can be traced back to Dewey's influence on education in China in the 1920's.

The rise of Chinese nationalism and chauvinism in the early 1930's brought another shift. In some ways this period resembled again the German phase, when centralization and conservatism dominated the thinking of Chinese educational leaders. Yet, as Professor Chyu suggests, this phase was the true beginning of China's taking command of her own destiny in education. Unfortunately for educators and reforms, war and revolution precluded any semblance of administrative organization and creative educational development. It might be suggested that, considering the horrific events which took place in China in the 1930's and 1940's, it is surprising that any form of formal education was able to continue.

Not until the early 1950's was the government of China in Taiwan able to bring about the necessary educational reforms. Today the model of education in the high schools in Taiwan suggests these influences: the American approach to teaching, the German emphasis on self-discipline, the French model of educational centralization, the Japanese emphasis on moral education, and the traditional Chinese values of education based on competition without regard to class status and as a place for ethical and intellectual development. The examination system in Taiwan today can find its antecedents in the 2,000 years of traditional Chinese educational history. What Taiwan has done in developing its high schools is use the best ideas, philosophy, and organizational models from around the world to create a learning climate and administrative and pedagogical system that by all measures must be seen as excellent.

15. THE YEAR OF EDUCATIONAL REFORM, 1968: ASSESSMENT AND APPRAISAL

The year was 1968 and it was an important one for tertiary education in Taiwan, for it was then that the educative system was expanded from compulsory free education, grades 1-6, to free education for all students, grades 1-9.

Little is written in the English language about this major change in educational policy. Yet, because the expansion of education opportunity had such a profound effect on the growth of the modern academic and vocational high school in Formosa, it is important that the topic be explored here.

The goal of the senior academic high school is to develop in its students both mental and physical health and to create a climate where outstanding boys and girls can gain the necessary academic and personal qualities that lay the foundation for advanced academic studies and specialized professional education. Admission to the academic high school in Taiwan is predicated on two factors: successful completion of the academic high school curriculum and showing exceptional talents through the national high school admission examination (which is given yearly and is taken by children who are in their ninth year of school and who desire to matriculate into an academic high school).

There was in Taiwan in the early 1960's a good deal of discussion over improving the quality of education and making more educational opportunities available to greater portions of the populace.* It was recognized that expanding the free educational system from six to nine years would be very

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*In developing this section, I have relied on interviews and newspaper articles. The work used most, however, was the excellent study by Dr. Martin Joseph Langan, "Educational Developments in the Republic of China, 1960-1970: Their Impact on Nation-Building Efforts (Unpublished dissertation, St. Johns University, 1975).

costly and would also create a paucity of teachers qualified to teach at the junior high level. A shortage of facilities was also anticipated.

Prior to 1968, students who graduated from the primary school (grades 1-6) were required to take a demanding examination to matriculate into the junior high school. In 1964, there were some 1.3 million youths in the junior high school age bracket (13-17). Of these, only 460,000 had passed the junior high school entrance examination and were attending that level of education. Some 900,000 young men and women were denied admission to (or chose not to attend) the junior high school. The CHINA POST, in an editorial of January 16, 1964, stated that "this constituted a waste of human resources that could be transformed into more productive citizens" (CHINA POST, January 16, 1964, p. 6).

It was also correctly determined by the educational leadership in Taiwan that the arduous process of preparing for the junior high school entrance exam was detrimental to the health and well-being of the children of the society. Vice Minister of Education Dr. Poe Hsueh-peng stated that the physical and mental health of the elementary school children was being threatened by the fear and anticipation of the examination. Dr. Poe pointed out that research had shown grade school children were becoming more frail, shorter in height, and were experiencing visual difficulties due to the problems associated with preparation that prefigured the junior high school examination (CHINA POST, November 1, 1960, p. 4).

The situation was exacerbated by the schools themselves that had developed very intensive classes to tutor and prepare fifth- and sixth-grade students for the strenuous entrance examination. These supplemental classes were held before the regular school day and also in the evenings and on holidays and weekends. Parents were required to pay for these "cram courses"; many families also hired private tutors to help prepare their youngster for the rigorous examination.

In the mid-1960's the economy of Taiwan began to show marked growth. As with Japan, the economic growth began in a variety of small industries. Because of the low cost of labor, the high population, the small taxes imposed on industry by the government, the good quality of Chinese workmanship, and the belief by the central government that self-dependency in economic matters was desirable, it was felt that a more educated work force was required for national reconstruction. The laws of Taiwan forbid children under 14 to work; yet many youngsters who were not able to attend junior high school were also too young to work. This was viewed as a waste of human potential and also a potential cause for social unrest and juvenile problems that had become endemic in many industrialized and pre-industrialized societies in the 1960's.

All of these forces--the humanistic, the pragmatic, the need for industrial growth, and the political and social concerns--came together and fostered in the national government a commitment to bring about education reform that would expand educational opportunities for youngsters age 13-17.

Early in 1964, the Ministry of Education announced formally to the public of Taiwan that a commitment to expand education for all from six years to nine years had been put into effect. Minister Chi-Lu Huang indicated in his remarks which appeared in the CHINA POST (January 16, 1964, p. 6) that the current six-year model was inadequate to meet the needs of Taiwan's expanding social and economic commitments. It was also implied in various speeches and editorials that Taiwan's vital place in world affairs, as the sole representative for the Chinese people on both sides of the Formosa Straits, required her to be a showplace in human resource development. Overseas Chinese, irrespective of their citizenship, remain reverent to their homeland; a strong Taiwan with a well-educated populace is viewed as important for Taiwan's status as the single representative of all China.

The new government policy indicated that the nation would phase in the three additional years of education and also eliminate the requirement to take the previously mandatory junior high school entrance examination. The Ministry of Education further stressed that two options would be available at the first stage: free but not compulsory education, grades 7-9, or three years of government-sponsored formal vocational education and training. At this same time, the Ministry of Education indicated that grades 1-6 would meet for a full day and not for only portions of the day, as had been the policy since the early 1950's when grades 1-6 were made compulsory for all youngsters.

Dr. W. F. Lew states that the objective was to provide the youth with more academic and skilled training to meet the needs of industrial development; consequently, more stress was placed on vocational training during the additional three years of free education (Lew, 1978, pp. 317-318).

There was uncertainty in the mid-1960's, reflected in the many articles and editorials in the English language Chinese newspapers, concerning how monies would be garnered to comply with the edict of the national government and its Ministry of Education. Estimates of over two billion dollars (Taiwan money) was suggested as needed to initiate said program. Monies were to be secured from three sources: (1) a new surcharge on a variety of different essential commodities, (2) from parents of children who would now be charged slightly greater tuition, and (3) from assistance derived from the United States and the Sino-American Fund.

In the year 1965, it became apparent to the educational authorities that the amount of money requested was insufficient and that implementation of the nine-year education schemata would be more difficult than initially envisioned. Two major problems hampered the transitions: (1) Construction

of the necessary new junior high schools was more costly and time consuming than expected, and (2) it became evident that there was a severe paucity in the number of teachers qualified to teach at the junior high level. It was not until May of 1966 that the government was able to announce with some certainty the timetable for implementing the nine-year program. The CHINA TIMES (p. 6) on Many 23, 1966, told the public that, effective 1968, the new program would be in effect. Kinmen* was the first region to have the compulsory education, followed by Taipei municipality.

To enhance the smooth transition of the six-year to nine-year education program, an eight-person committee was appointed by the cabinet to evaluate the best methods of implementation and also the most recommended solutions to the teacher shortage and the financial issue. The committee developed a report titled "Outline for Implementation of Nine-Year Free Education" (Taipei: Board of Education, August, 1968). The report detailed the best ways to complete educational reconstruction, and when it was submitted to the central government it was hailed as outstanding. The Executive Yuan and the President completed the necessary review, and the report was retitled the "Free Education Enactment" and became the fundamental legislation for the revised nine-year educational system. Because both public and private education ultimately falls under the Ministry of Education, the Free Education

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*Kinmen, formerly called Quemoy, is a small, beautiful island some two miles off the coast of mainland China, Fukien Province. I had the great pleasure of spending two days in Kinmen observing the reconstruction efforts, the hospital, schools, and children. The government of Taiwan considers Kinmen as a vital fortress for its defensive system and has spent unknown millions to build underground facilities that can assure the islet's defensive security in all but the event of a nuclear or chemical agent attack. The schools in Kinmen are well-kept and are seen as a model for other remote regions. Few of the children go to academic colleges and universities.

Enactment of 1968 was made equally applicable in all of its manifestations to private junior high schools (most of which were affiliated with a church).

To solve the problem of the teacher shortage, men and women who currently held posts in elementary schools could take special in-service training and thence be certified as junior high school teachers. Individuals who held a bachelor's degree but who had not taken a teacher education program could also become certified through special courses and workshops. Because of these policies, some 3,660 new junior high school teachers were added to the profession. A total of 429 junior high schools were also now prepared to receive the additional students who, as an entering class, numbered over 218,000. For children who did not enter the comprehensive academically oriented junior high school, classes and workshops in vocational and technical training were inaugurated. On-the-job training was also begun for youngsters who did not wish to continue their learning in a classroom setting. During the first year in Taipei City, 87 percent of the children who had completed elementary school began junior high school (public and private/ academic and vocational). Nationwide, it can be assumed that a smaller percentage began attending the new* national junior high school.

As an enticement for parents to send their children to the new junior high schools, uniforms were not required. It was felt that the uniform might be beyond the financial means of some of the poorer families in Taiwan; also, textbooks were given to the students as a way of deferring costs. Those who could afford it were required to pay a tuition charge of about US$7.00 per semester; those who could not afford this were given tuition waivers. Junior high school was not compulsory education, but it

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*In the educational literature of the 1960's, the junior high school is referred to as the "National High School."

was now free and open to all who had completed the sixth grade. No general admission examination was required, though students who had done poorly in the primary grades were encouraged to go to vocational school. It also became the new policy of Taiwan to have pupils attend the junior high school that was geographically closest to their homes. Prior to 1968, junior high schools were rated, and a student who had done well on the national admission exam might be required to travel a long distance to go to the best school. The concept of the local school, which had traditionally prevailed with elementary education, was now in theory made applicable to the junior high school. Yet some traditions are hard to erase. Certain junior high schools had an excellent reputation for sending their pupils to the better high schools in the nation; these schools still attracted top quality students who would temporarily change their home address in order to attend these select institutions. Even today (1985), certain junior high schools have the reputation of excellence, and parents will attempt to have their youngsters attend these schools by using addresses of friends or relatives as the location of primary residency.

Until 1970, when the program of the nine-year free system was finally in place, the national government was required to spend a disproportionate amount of its educational budget on junior high education and educators.*

The record shows that, island-wide, in 1969 some 75 percent of the total number of primary school graduates attended the new public junior high schools. Another five percent attended private junior high schools (most of which were located in the city of Taipei or Kaohsiung).

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*The Ministry of Education was required to raise its educational budget from NT$2.9 billion to over NT$3.6 billion, 1968-1970 (CHINA TIMES, February 11, 1969, p. 8).

The new nine-year plan was conducted as an academically integrated system. Traditional subjects of Chinese, mathematics, science, ethical behavior, geography, history, music, health, and English dominated the curriculum of the new junior high school. Vocational classes were also included in the new curriculum of the junior high school. Educational authorities in China have always believed that working with one's hands should be included in even the most academic educational settings. Counselors were employed to assist ninth graders in making plans for their future: whether to prepare for the highly academic high school entrance examination; seek acceptance at a vocational high school, a junior five-year normal teachers college, or a technical training program; or perhaps seek employment in Taiwan's rapidly developing industrial/commercial complex.

16. PROVING GROUND: THE MIDDLE SCHOOL AS A PLACE FOR PREPARATION

High school education as used in this study includes grades 10, 11, and 12 of the senior academic high school. In order to understand fully the secondary educative process, it is necessary to look briefly at the national junior high school, which is the feeder school for tertiary education. The educational leaders in Taiwan refer to grades 1-9 as basic education, though the first six years are really quite different from the junior high school period. According to the Statute of Basic Education, promulgated in May of 1979, the goal of the junior high school experience is to cultivate well-balanced development in moral, intellectual, physical, social, and aesthetic education in citizens.

Junior high school students do not have to pay tuition. Pupils with limited resources are provided with textbooks by the government and exempted from other fees. Academically outstanding students and pupils of limited means are granted scholarships and financial aid.

In the past, placement of junior high school students into classes, grades 7-9, was based primarily on test scores and IQ's. This policy fell under serious criticism and has been replaced by a more socially acceptable and democratic modality for assisting the learning needs of the young.

In 1978 the Ministry of Education presented "The Tentative Measures for Improving Student Grouping in Junior High School." This was put into effect in the 1979-80 academic year. By way of this promulgation, the Ministry of Education required fair measures to be taken in regard to the junior high level of education:

> a) Students in the first year are divided into separate classes, each of which is more or less homogeneous, through normal distribution. From the second year on, students may be divided into classes in accordance with their achievements and abilities if needs arise, or a mixture of homogeneous grouping and abilities grouping.
>
> b) Students are generally in homogeneous grouping classes, in which students attend courses which are not divided according to their achievements and abilities. The second step is to divide students into a unit of two to three classes according to their abilities in such courses as English and Mathematics. Those which are not further divided stay at their original classrooms to attend classes.
>
> c) In order to strengthen vocational courses and skill training in the third year, students may be divided into separate classes if necessary.
>
> d) Grouping of students according to their abilities from the worst to the best in a ladder series is strictly prohibited, that is, the best students attend the best classes and the second best students, the second best classes, and so on (Department of Education, Taiwan Provincial Government, EDUCATION IN TAIWAN PROVINCE, 1982, pp. 28-29).

The qualitative and quantitative impact of the open admission junior high school since 1968 has been profound. In 1967, only 57.97 percent of

the graduates of grade six matriculated into the academic or vocational junior high school. In the year 1982, some 99.75 percent of those completing the sixth grade continued their formal education. The goal of universal education, grades 1-9, was successfully fulfilled in a period of 15 years. In the junior high school today, a balance exists between the student's intellectual needs and his physical, mental, and emotional development. In the last five years, greater emphasis has been placed on such topics as music, art, group educational activities, and other topics that, when added to academic courses, are designed to develop a well-rounded student. A purposeful de-emphasis on purely intellectual activities and academic courses has also been emphasized. Yet, children in the junior high school are well aware of the need to study diligently and to anticipate the single main event in those youthful years--the national high school entrance examination which is given in the spring of the ninth grade. This event is now the first major examination that the Chinese children of Taiwan must take. For many it is their only way of gaining the opportunity to be successful in their society.

Prior to the test--which is given nationwide on the same day under the watchful eye of the Ministry of Education--many eighth and ninth graders attend tutoring sessions and cram sessions on subjects that are likely to be tested. Parents are eager to have their progeny accepted in an academic high school, or at least a good vocational high school, and will spare no expense in their help.

The high school entrance examination does not judge potential; rather, like most academic examinations, it tests a person's ability to recall facts, to express oneself clearly, and to prepare in all subjects tested for questions that come from a variety of fields. Lasting two full days and held

at the various junior high schools, the examination covers the following subjects: Chinese, English, modern Chinese history, geography, mathematics, and the sciences. Each subject is tested for 60-80 minutes, and there is a 30-minute break between tests. The student may not leave the room for any reason.

On the day prior to the national high school entrance examination, the pupil will go to the school and locate his assigned room and his seat. On the day of the examination, the testee will arrive quite early and check in. He will show an entrance card and also his photograph which is on his school identification card. He may bring to the examination a pen, ruler, and eraser.

At the beginning of each test period, a piece of paper is given out with the examination question at the top of the page. Students do sit close together and some cheating does exist, but it is said to be rather rare.

Prior to sitting for the entrance examination, the student will have been put through a number of simulation exercises that help him to adjust to the examination setting. These are held at the junior high school during the ninth grade and are run by teachers. Also, teachers review material that was covered on previous examinations in the hope that it might appear again (after the examination the test questions are made public). Schools remain open after the class day ends at 4:00 p.m., often late into the evening so boys and girls may sequester themselves to study and discuss the examination.

In about three weeks the score on the test is sent to the student, as well as to the high school that he or she is entitled to attend. High schools, like colleges, are rated in order of their quality, and a very high score on the examination allows the child to attend the highest rated high schools. Generally, they are in Taipei, Kaohsiung, or Taichung, the three main cities in Taiwan. Parents and students do not consider it an issue that the best

school to which they are admitted is some distance from their home; they will make the necessary arrangements to attend that high school which they perceive to be best for their academic needs.

17. CURRICULUM CONFIGURATION AND THE ACADEMIC HIGH SCHOOL

In modern Taiwan, the high school curriculum has two primary objectives: to introduce the student to academic subject matter (which prepares him for the College Entrance Examination) and to create in the student a sense of moral and ethical uprightness. A secondary mission of curriculum is to help the student create habits that are healthy and will lead to a well-rounded emotional, physical, and psychological life.

At the center of any educational system is the curriculum. Curriculum as it shall be used in this essay may be defined to mean 'a collection of courses that when studied give the student a body of knowledge, a sense of values, and techniques. The courses are offered and arranged in such a manner that the program which they form becomes synergistic, interrelated, and holistic.'

A curriculum, therefore, must be fluid in terms of bringing in new ideas for society and yet stable enough to allow younger persons to have a sense of continuity with the civilization in which they live.

In the establishment of a curriculum for any educational setting, certain presuppositions are made:

1. Human culture is learned, not biologically or metaphysically inherited.

2. The human mind and spirit are plastic.

3. Without education, younger generations are incapable of survival, as we know it, much less of developing mature social values.

4. A relationship exists between what is taught (input) and the student's moral and intellectual behavior (output).

5. It is in the best interest of a nation to create learning experiences that contribute to the social good and enhance the concept of pride in oneself.

6. A fundamental progression takes place in learning--from the simple to the complex.

7. The arrangement and organization of learning activities is essential if schools are to have more than a maintenance function.

8. A common base of information, generalizations, assumptions, and ideals is necessary in a society if progress and harmony are to be enhanced.

9. Learning is most effective if the student senses a relevance in his subject matter.

10. Older scholars and educators are better equipped than students to determine what students should learn, how they should learn, and in what sequence learning must take place.

A curriculum is indicative of a number of things: It tells the researcher what a society values as skills and behavior roles of its young; it suggests how developed a school or college is; it shows where a society places greatest stress; it allows one to judge behavior modifications that are anticipated; and it suggests not only the history of a nation or society but also what the leadership wants the populace to be like in the future. A curriculum is the brain of an educational institution in that, theoretically, only those items covered in the formal learning process will be absorbed by the student. It is fallacious to assume that forces outside of the school do not interface with the learning process in the school; the development of curriculum makes no allowance for this supposition and, therefore, becomes a prototype of the society and the mindset of the educated class.

The great importance of curriculum organization and development makes it a topic that must be explored if we are better to understand the modern Chinese high school in Taiwan.

In 1984, after a number of years of study, the Ministry of Education changed rather dramatically the secondary school curriculum. From the mid-1950's until the beginning of the fall term in 1984, a high school student was required to have a "major" area of emphasis. Two fields were available: natural sciences and social sciences. When the child graduated from high school and sat for the Joint College Entrance Examination , he indicated which of these fields was his choice and was examined in that area. (Actually, there were four fields for examination, but generally they could be considered science or humanities in the broadest defintion of those words). A unified curriculum did exist, and students took basically the same classes. The amount of time spent in one subject differed, however, depending on a student's choice of natural science or social science.

The educational authorities concluded that it was too much of a burden to place on a child age 15-16 the responsibility of selecting his career. If one chose natural science, it would be virtually impossible to move into a social science college major. The Ministry of Education task force for revision of the high school curriculum chose to make available more options for a young person by developing in the early 1980's a more integrated curriculum. This was placed into effect--with numerous difficulties--in August of 1984.

Below is the schema of the curriculum of the academic high school in Taiwan prior to 1984.

THE ACADEMIC CURRICULUM PRIOR TO 1984:

SUBJECTS AND WEEKLY TEACHING HOURS
IN SENIOR HIGH SCHOOLS*

Grade	(A) Major in Natural Sciences						(B) Major in Social Sciences					
	1		2		3		1		2		3	
(Semester)	I	II	I	II	I	II	I	II	I	II	I	II
Chinese	6	6	5	5	5	5	6	6	7	7	7	7
English	6	6	5	5	5	5	6	6	7	7	7	7
Civics	2	2	2	2			2	2	2	2		
Three Principles of the People					2	2					2	2
History	2	2	2	2			2	2	2	2		
History of Chinese Culture											2	2
Geography	2	2	2	2			2	2	2	2	2	2
Mathematics	4	4	6	6	6	6	4	4	4	4	4	4
Physics					6	6					3	3
Chemistry			6	6					3	3		
Biology	3	3					3	3				
Earth Science					2	2						
Physical Education	2	2	2	2	2	2	2	2	2	2	2	2
Music	1	1	1	1			1	1	1	1		
Fine Arts	1	1	1	1			1	1	1	1		
Industrial Arts (Home Economics for girls)	2	2	2	2			2	2				
Military Training (Military Training & Nursing for girls)	2	2	2	2	2	2	2	2	2	2	2	2
Selective Subjects					2	2					2	2
					≀	≀					≀	≀
					6	6					5	5
					32	32					33	33
					≀	≀					≀	≀
TOTAL	33	33	36	36	36	36	33	33	35	35	36	36

*Education in Republic of China, 1983, p.36.

In high school, the four subjects receiving major attention are Chinese, mathematics, science, and social studies. More time is devoted to Chinese language in all grades 1-12 than to any other discipline because of the great difficulty students have in mastering the complicated Chinese ideographs. Math and science are considered of great importance in the Chinese educative process for their presumed transfer value in inculcating mental discipline. Great emphasis is also placed on social studies as a vehicle for developing good citizenship. Educators in Taiwan also feel strongly that the fine arts, particularly music, have a place in the curriculum and that a relationship exists between musical talent and competency in the mathematical area.

The curriculum changes that occurred in 1984 did not have a profound substantive effect on the education configuration; however, the adjustments made will have a modifying impact on learning and also on the national examination system.

The Committee on High School Curriculum Reform was set up under the Ministry of Education and consisted of Ministry personnel (who took the leadership), principals, and educators from public and higher education. Its charge was to develop a curriculum configuration for the academic high school that would allow all students to have greater opportunities in both the traditional natural sciences and the classic social sciences and yet would not diminish the academic preparedness of young men and women. It was also the mission of the Curriculum Committee to include in the academic high school a greater number of electives. The reason for this was that students who chose to begin preparation in a certain specific discipline, e.g., medical science, could take extra courses in this field that would anticipate both their personal interest and that specific section of the Joint College Entrance Examination.

Flexibility was the main concern of the Curriculum Committee. Many children were required at the age of 15-16 to select a subject area that would prefigure their future career potential. The educators of Taiwan chose to make more flexible the high school learning process so that a young person might have the option of sampling all areas equally. Another feature of the new curriculum is the large number of elective courses available. These include such subjects as a second foreign language option in German, French, or Spanish. English is a required second language, grades 7-12. The new curriculum modality also tends to upgrade the natural sciences for young people who select to major--at the college level--in a field that requires a science-oriented background. And yet this is not done at the expense of the humanities and liberal arts.

The following chart illustrates the new curriculum, the years various courses are taken, and the weight given to each subject area.*

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*Committee on High School Curriculum Reform, "Report of Curriculum Diagrams, Analyses, and Programmatic Changes, 1984" (Taipei: Ministry of Education, 1984), p. 6 (in Chinese only).

THE NEW ACADEMIC HIGH SCHOOL CURRICULUM THAT BECAME EFFECTIVE, FALL 1984

SUBJECTS AND WEEKLY TEACHING HOURS
IN SENIOR HIGH SCHOOLS

GRADE ▶	1		2		3	
(SEMESTER) ▶	I	II	I	II	I	II
Chinese	5	5	5	5	6	6
English	5	5	5	5	6	6
Civics	2	2	2	2		
Three Principles of the People					2	2
History	2	2	2	2		
Geography	2	2	2	2		
Mathematics	5	5	4	4		
Physics *1			3	3		
Chemistry *1			3	3		
Biology *1			3	3		
Earth Science *1			3	3		
Physical Education	2	2	2	2	2	2
Music	1	1	1	1		
Fine Arts	1	1	1	1		
Industrial Arts *2	2	2	2	2		
Home Economics *2	2	2	2	2		
Military Training (Military Training & Nursing for girls)	2	2	2	2	2	2
ClasssMeeting	1	1	1	1	1	1
Group Activities	1	1	1	1	1	1

- CONTINUED -

Selective Subjects						
Languages						
Social Science			3	3	14	14
Mathematics			6	6	19	19
Natural Science						
Fine Arts						
Physical Education			36	36	34	34
TOTAL	37	37	39	39	39	39

Notes:

*1 In the second year of senior high school, natural science is divided into four courses - Physics, Chemistry, Biology, and Earth Science. The student must elect any two courses out of three--hour weekly.

*2 In the first and second year, the student must elect either Industrial Arts or Home Economics with two--hour study weekly.

* This chart was supplied by the "Committee on Curriculum Reform Report," 1984.

Comparing the new academic high school curriculum with the high school curriculum that prevailed prior to the autumn of 1984, one notes that the student may now take many more electives than in the past and also that the integrated, unified nature of the curriculum gives all students more common academic core subjects and yet allows them to select from a much broader range of electives.

The main problem with the new curriculum is twofold: (1) There are not enough highly qualified teachers available to cover all new fields of study made available by the new curriculum. This is particularly evident in the second language option. Taiwan has strict guidelines for teacher certification for high school pedagogues; subjects like French and earth science will be difficult to cover with the existing personnel and the anticipated new graduates. One must remember that all high schools are obligated to offer essentially the same curriculum to all students, irrespective of their location. Finding certified French or German teachers to teach in Kinmen or Penghu will present great difficulties. (2) The second major flaw in the new curriculum design is related to the Joint College Entrance Examination. Students in high school study for the examination. Virtually all students interviewed indicated that this was their main reason for studying and doing homework. Family honor and success in the high school examination are seen as the same by high school students in Taiwan. Though it is nice to believe that the high school pupil is interested primarily in learning as an end in itself, the fact remains that students are determined to pass the JCEE and be admitted to a university. As a consequence, they see classes that do not pertain to the examination as superfluous to their needs. They generally take courses that will be part of the examination process, and most of the

electives do not fit this category. Examples would be the second foreign language option and earth science, which are electives but which have only a tangential relationship to the JCEE.

When this issue was addressed with members of the Division for Secondary Schools of the Ministry of Education, they concurred and admitted that the electives would be of little interest to students unless the Joint College Entrance Examination reflected these new classes.

The Committee on High School Curriculum Reform also presented guidelines in five other areas related to the new high school curriculum: (1) Educational Design, (2) Educational Materials, (3) Methodology, (4) Guidance, and (5) Evaluation.

This writer was fortunate to be given the latest materials available through the Ministry of Education on the five topics mentioned above. The newness of this literature precluded its being available in English; probably this is the first time that their material has been reviewed by a foreign researcher and incorporated into the scholarship of comparative education.

1. Educational Design. With the advent of the new curriculum, the Committee on Curriculum reform chose to address the concept of Educational Design as a corollary issue ("Curriculum Diagrams," 1984).

• Education at the high school level was reaffirmed as preparation for the rigors of college and university, yet not specifically for preparation for the Joint College Entrance Examination. Because the JCEE plays such a pivotal role in a person's life, many teachers and schools had developed their methodologies to enhance a person's chances for passing the JCEE--often at the expense of developing a well-rounded, healthy, and psychologically

adjusted student. In the future, more emphasis will be placed on the education process and its relationship to healthy growth and development, and less emphasis will be directed to the national examination system.

* The new design of education also emphasizes that the greater selection of electives--rather than the compulsory grouping previously used--should help bring about a diversification of subject areas and that this will in turn meet the requirements of students' individual differences.

* Outside-of-school activities, as well as those mandated by the institution, are both relevant to the new curriculum; and the teacher and the administrators, using the new curriculum design as a guide, should be concerned equally with both academic excellence and the behavior of the student.

2. Materials. The second topic is concerned with texts and hardware items related to the orderly process of learning.

* Textbooks* (which are not prescribed by the Ministry of Education) are to be selected so as to meet the individual needs of students. Those texts that are developed by the Ministry of Education will continue to be concerned with moral and ethical issues and topics that lend themselves to varying interpretations.

* The spirit of "ethics," "democracy," and the scientific approach to learning are to be considered when purchasing all texts and other materials used in the teaching/learning setting.

* Courses should have some link with the daily lives of the students, and the materials used are to enhance this connection. The type of text and other materials must be geared toward two objectives: (1) the amount of

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*The Chinese use the word "text" in the broadest possible way.

time available for the pedagogue to cover the material, and (2) the learning readiness of the students in the given class. Texts that are too long or too difficult are less valuable to learning than texts that conform to the needs of the teacher and his pupils.

* Traditional textbooks must be seen as only one of many ways of presenting academic material. The teacher is encouraged to use a variety of materials from the natural and social sciences that can be used to augment the regular textbooks.

* Students should be encouraged to discuss the materials that they are studying and to apply, outside of school, the ideas and concepts that have been presented in the classroom.

3. Methodology. Teachers should attempt in all cases to adopt appropriate teaching methodology vis-a-vis the nature of the courses and the dynamics of the studentry in the class. The abilities of the students and the academic materials to be taught should prefigure methodology.

* The high school teacher, the committee suggests, should adopt a methodology that emphasizes the process of learning rather than the pure task of acquiring information. Because we are living in an age of expanding information and knowledge, factual learning is less important than understanding the process of acquiring knowledge.

* Teaching is most effective when students are cultivated in their thinking, the development of concepts, attitudes, and behavior. Teachers should make all efforts to enable students to live in a positive, healthy environment. Students should not be "stuffed" with knowledge; rather, information and ideas should be shared with the student based on their relevance to the student's needs.

* Teachers should prepare their lessons in organized teaching/learning units that are the plan of their activities for each day and week. These

teaching outlines should be prepared for all courses and should include not only the information but also the material and methodology used.

* It is recommended that teachers should pay particular attention to "simultaneous learning principles." By this is meant that the teacher should view the process of learning as a holistic model which fulfills the students' eagerness to learn and develop.

* Methodology should be established to guide students in such a way as to develop in them the ability to think continually and make judgments.

* When possible, teachers should use the latest technologies available to help students learn and develop.

* If the teacher decides to use the concept of "grouping," it should be done with "a sense of honor" and respect for the student.

4. Guidance. Not unlike the teachings of Cŏnfucius, the modern educator is encouraged to share love with students, treat them with patience, and be role models for their charges. This can be achieved by working diligently, being enthused, and having a general appreciation of the profession of teaching.

* All teachers in the school setting must take the responsibility of guiding the child and advising him on proper study habits and good behavior. Emphasis must be placed on the group cooperation and positive human relations.

* Guidance, including all that it suggests, is essential in the school setting for all students and is directly related to good behavior, healthy attitudes, and academic achievement.

* All teachers should take a keen interest in the personal lives of their students and be well aware of the students' records and past problems the students may have faced. Students must all be treated equally in areas of moral development, but their personal needs must be addressed in academic development.

5. Evaluation. Because teaching covers five areas of development--intellectual, moral, physical, artistic, and group behavior--so should evaluation of children.

* Methods of evaluation in the Taiwan high school are by observation of the student's performance, recording activities, positive criticism, oral tests, written tests, performance in specific activities, art and music works, and traditional grading. Teachers are given the right to apply any method according to the nature of the course or text.

* Students come to the classroom setting with different talents. These must be taken into consideration when the teacher determines his speed of presentation and the order in which materials are to be covered.

* Evaluation as defined by the document of the Curriculum Committee should not be used to make comparisons among or between students. This could cause jealousy and a sense of inferiority. The true purpose of evaluation is to let the student know he is progressing and to let him see the comparison of his efforts from grade to grade.

* The true purpose of teaching evaluation is to help the teacher improve his skills in the classroom in terms of methodology and materials, as well as to grade students.

* Equally important, evaluation as defined in this report should also be used to inform parents of their child's achievement. If this is done, parents and the personnel at the school can better work to achieve a mutual understanding of the student's needs and can cooperate in the best interest of the juvenile.

In summation, the new curriculum and accompanying guidelines developed by the Curriculum Reform Committee create a more flexible teaching/learning

environment and emulate in many ways the concept of the ideal American high school, where a core of subjects is supported by classes that are designed to meet individual learning needs and also, as an equally important dimension of the setting, to prepare the student for the rigors of the college entrance examination system and university life. One of the most common criticisms of Chinese education in Taiwan is that it is too structured and too oriented to competition. The new curriculum configuration and the recommendations that were spelled out by the Curriculum Committee mitigate against this concern of rigidity and inflexibility.

18. DISCIPLINE AND PARENTAL INVOLVEMENT: THE HIGH SCHOOL YEARS

The children of China have a built-in respect for learning and the teacher, and severe problems of discipline, vandalism, or violence are very rare in the high schools of Taiwan. Discipline is considered vital and central to the secondary educative process in Taiwan, and enforcement of the codes of discipline is carried out by all who have a role in the learning setting. Discipline problems as found in American schools are almost non-existent in the Chinese high schools of Taiwan.

There is an enormously high demand for academic high school education: A high value is placed on schooling by parents and grandparents (many of whom live in the home with the child and his parents), and adolescents are highly motivated to learn and participate in the learning enterprise. For these and a host of additional reasons, such as the profound influence Chinese history and culture have had on younger Chinese and because education

has always been viewed as the main vehicle for success in China, school discipline problems do not emerge to any significant degree. While much of the world experienced social unrest in the late 1960's, young people in Taiwan went about their chores as students and continued to live lives free of the disruptiveness found in many high schools in the United States, Japan, and Western Europe.

This is not to suggest that mischievous activities do not exist in Taiwan's high schools. Rather, by the standards of the U. S., problems of any consequence that are disruptive to the educational continuum are largely absent. Parents emphasize from early in a child's life the importance of education and also the necessity of the juvenile to honor his ancestors and his family name by good behavior and proper study habits.

The Chinese families of Taiwan consider proper behavior as very important and try to enforce uprightness at home and by transference to the school. From his first day in school, the child is exhorted to behave--by his home-room teacher, the morals instruction, and by inspirational speeches by the principal of the school (usually at 7:45 in the morning and/or at 4:45 p.m. when the school day ends). Student monitors also encourage the student to behave properly. By the time a child is admitted to the high school, he has been conditioned by both parental guidance and the school environment to behave appropriately and to conform to the rules and regulations of the high school setting. Generally, a child will pass through high school without a single significant discipline problem, yet in some rare cases the stress that is placed on the high school student by the highly rigorous education system will lead to frustrations and anxiety.

Discipline in Taiwan high schools can be characterized as noncorporal in nature with a reliance on psychological and sociological inducements. Teachers who do resort to physical punishment may be dismissed. Punishment is restricted to a reproof from the pedagogue recorded in a desk book. In rare cases the principal may reprimand a pupil for a misdemeanor. Expectations regarding conduct are high, and positive incentives receive attention. Good conduct, hard work, and academic achievement seem inextricably interrelated. Under the present circumstances, there is no reason to question the effectiveness of the methods adopted to teach and acculturate into a clearly articulated secular role of ethical behavior.

Corporal punishment (which is still sanctioned in 45 states in the U. S.) if officially forbidden in the high schools of Taiwan. In the 1950's and 1960's it was a rather common form of behavior modification, but recent legislation has removed it from the purview of teachers.

The high school in Taiwan has strict rules governing classroom behavior, both on campus and also off campus. Students, teachers, deans, and principals enforce them. Each class has a pupil who is the class leader and, in the absence or lateness of the teacher, he/she may tell the class to be quiet or to straighten the room. When the teacher enters the room, all students stand and then quickly sit at their desks. The teaching/learning process then begins and lasts until the end of the 50-minute period. Students may not leave their work location without the explicit permission of the teacher or student monitor.

Behavior is recorded by each teacher in the high school in a "discipline book." If there is an infraction of a rule--the student misbehaves--the child is given a point. After nine points, something that is an extremely rare occurence, the child must be suspended from school. The principal, in

conjunction with officials from the Ministry of Education, orchestrates the suspension or expulsion. Interviews with students who are currently in or have recently graduated from high school suggest that one point a year is really above the average. When a pupil does receive a point for an impropriety, his/her name is posted on the school bulletin board publicly, and also a letter is sent to his parents. It is a great burden to the student to have this on his record, and behavior normally is improved immediately.

Another device to help high school children behave properly is the personal diary that all students must keep. In this they write down their problems, their successes, and their feelings on most topics and events. Students who are having problems at home or with peers are encouraged to write about these. This not only allows the student to develop a non-directed writing style, it also helps vent some problems before they become serious. Homeroom teachers collect these weekly, read them, and make suggestions on how problems or concerns may be resolved. The notebook is considered an important part of the student's self-discipline and, it is felt, leads to reflection on proper attitudes and behavior.

The most common discipline issues discussed by students who are currently in high school were not keeping their hair at the proper length (boys, crew cut; girls, at mid-ear), wearing curly hair (which is not allowed unless it is natural), wearing makeup, chewing gum on school grounds, lateness, arguing with peers, not completing homework assignments, and a variety of problems with the colorful school uniforms that all high school children are required to wear.

It should be noted here that the school uniform is seen as a strong feature of the high school in Taiwan. Men usually wear tan; girls wear different colors, depending on their schools. (Incidentally, the best schools are not coeducational. In all schools, the classes and homerooms

are single-sex). There is still a prevalent belief that the school uniform is a social leveler. It makes rich and poor children equal in the eyes of teachers, peers, and even themselves. The poor cannot be distinguished from the rich, and the flamboyant cannot distract the more sober from their educational tasks.

When this writer asked students their views of the required uniform, most agreed that it was to their advantage not to have to worry about the type of clothing to wear each day. A surprisingly large number suggested that there was a relationship between the uniform and their scholarship. They developed their idea in this way: The uniform of the high school is distinct, and that makes the student unique. Most youngsters do not get into an academic high school, and the uniform buys a type of prestige to the student and his parents, both in the family and in the neighborhood. There appears to be no resentment about the required uniform; students are less enthusiastic about the requirement of short hair for both boys and girls. Surprisingly, none of the students, teachers, or parents interviewed saw the school uniform as promoting conformity or precluding the development of artistic self-expression.

Because Taiwan has both hot and cold subtropical weather patterns and the school year is 240 days (including half a day on Saturdays), the uniform may be covered with a sweater, coat, or jacket. Girls wear long white socks and boys often wear short peaked hats in the cool winter months.

It is this writer's impression that discipline, the uniform, the notebook, and the point system code of conduct used to promote good behavior work well and that the sanctity of the school as a place for learning, teaching, and scholarship is enhanced in Taiwan by these aforementioned practices.

Parents play a critical yet nonintrusive role in the education of their children. Feelings of success or failure are shared greatly by parents, grandparents, siblings, and the student.

Educational policy in Taiwan gives the government total responsibility and authority for education and, in general, imposes on the parents only the obligation to comply with the laws governing educational policy and to send their children, grades 1-9, to school. Curriculum design, school buildings, recreation, attendance, behavior, teaching methods, hiring and dismissal of teachers, administrative appointments, and all other areas of pedagogical and administrative concern rest solely with the educational authorities. Parents are encouraged to visit schools and to meet with teachers, to attend sporting and cultural activities in which their children participate, and to give money to the school for special events; but they are not legally involved with the substantive aspects of education in Taiwan at the high school level or at other levels. Teachers visit with all parents whose children are not achieving at the expected level. These meetings are to encourage the parent to create a better learning setting for the child; they are not to seek advice from the parent on improving teaching methods.

Chinese education in the high schools of Taiwan comes with an almost metaphysical quality. The Chinese tradition of academic success represents not only a formal process of schooling but also a transformation of the self. Parents with children in a better academic high school also acquire the virtues of dignity and respect that are entitlements of the Chinese student. Within the Chinese heritage, education and its attainments are directly equated with honor and success, not only for the child who achieves but for the whole family and, in a transcendental way, for all ancestors who

have lived and all persons of the family name who are yet to be born. This view of a human continuum, based on educational success, is quite difficult for the Western mind to understand or accept; in Taiwan, it exists and is a topic of regular discussion. For this reason and for historical motives, there are strong incentives for parents to support and encourage their children to excel within the academic/formal educational setting.

No formal mechanism exists within the context of Taiwan's educational system for parents to present grievances. Difficulties are usually handled directly between the parent and the teacher. It is generally the duty of the individual teacher or the school guidance counselor to contact or call parents in case of minor student-related problems. Parent-teacher conferences are rare, and parents assume all is well if their child does not request that the parent see a teacher.

In general then, the school is not influenced by public interest groups or irate parents. Yet the influence of parents cannot be minimized when it comes to the child's success as a high school student.

The following brief interlude will deal with child raising in Taiwan and how it affects academic achievement at the high school level. It is based on observations this winter and those made over the last ten years on numerous trips to Taiwan and while living with Chinese families in Formosa.

In the Chinese family in Taiwan, a much closer parent-child relationship exists than what is generally found in the United States. Seldom will a family have a social event of any type that does not include all participants' children. The concept of the family unit as a social group is of great importance.

Children are not disciplined as we recognize that issue in American families. Mothers generally allow their preschoolers to run quite free, to talk back, and to eat what they want. Seldom are children required to go to bed at specific times. Napping is not enforced, nor is eating with the rest of the family seen as important. Mothers take on most of the responsibility for child rearing, with the father in the background. Grandmothers also have great influence in the nurturing process and are even more casual about discipline than the mother. A child will quite often sleep with his mother or grandmother until the age of six or seven. It is not unusual for two or three children to sleep with their mother and for the father to retreat to the child's bed for his sleeping. Babies in China are not toilet trained in the Western manner. Rather, they are put on the toilet or "pot" at about three months and are held there until finished. This is done perhaps twenty times per day, and children are awakened often in the evenings and put on their "pot." Fathers have little or no involvement with this process.

It appears that parental control is asserted through the close bonding of the mother and her child and the child's fear of losing this bonding if he does misbehave. Mothers are quick to express both love and displeasure (usually by a frown) with their child's behavior, and an angry grandmother or father is a most feared person.

Despite what appears to be a permissive attitude, children learn early that good behavior in public makes their mother happy and, therefore, they usually act accordingly. The family is seen as a group and, as such, older children have certain responsibilities for caring for the young. In most situations, the smallest child will be indulged by the older brother and sister, and parents will enforce this. A common sight is to see older pre-teen

girls carrying the little children on their backs and playing with them. Chinese children are not left to cry when they are upset. The mother or grandmother will usually pick them up immediately and carry them until they are happy. The Chinese child, by American standards, is pampered and spoiled; yet his behavior is normally very good. The reason seems to be that he does not wish to upset or disappoint his parents.

The period of permissiveness ends rather abruptly when the child enters the public school system. Conformity is demanded, and high expectations from the teacher, the parent, and from the child himself are the norm.

The high school student is, in many ways, self-disciplined and inner-directed as a means of continuing the positive relationship between himself and his parents. Mothers, grandmothers, and, to a lesser degree, fathers assist their children with the evening homework assignment. Parents are required to sign the homework booklet before the child returns it to the school. Normally, the mother helps the child with his homework, though in many Chinese families the father is better educated (formally) and his expertise is called upon. Chinese parents are also very willing to use their hard earned monies to hire tutors or to send their children to one of the many special private tutorial schools in Taiwan to better assure the child's academic success. Parents are prone to brag about their child's achievements and to discuss openly his grades with frtends and neighbors. A son's or daughter's acceptance at a good academic high school, and thence a top university, is the finest reward parents can be given for the sacrifices they have made for their child's education.

19. MORAL EDUCATION AND THE SCHOOL IN TAIWAN

Moral education* plays a vital role in the educative process of the school in Taiwan. In the West and particularly in America, teachers and administrators are encouraged not to address issues of controversy or morality in their classroom activities. There are a number of reasons for this: (1) General moral and ethical teaching are associated with religious teaching and theological positions on behavior. The separation of church and state implies that subjects that are of a religious nature should not be incorporated into the public school environment. Moral teachings in Taiwan are secular and philosophical in nature. (2) The United States is a nation which has persons of numerous ancestries and religious persuasions. As a consequence, the teaching of ethics via religion could be seen by minority religious groups as offensive to their own personally held beliefs. (3) In the Western democracies, the place of the individual and his free will to decide moral behavior is strongly emphasized. In Taiwan and most of the developed countries in the Orient, the group defines moral behavior, and it is the responsibility of the individual to conform and not confront the mores of the society. (4) Historically, China has had as its great leaders men who have been held in great esteem for their moral teaching and their virtue. Confucius and Dr. Sun Yat-sen both reflect this view. In the West, we have placed in positions of eminence leaders who have had their successes in politics, business, or military activities.

Hence, the moral heritage is both a secular and philosophical phenomenon in China and in modern Taiwan and is seen by educators and the public as vital to the growth and development of children, families, and the nation-state.

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*See Hwa Tae Cho, "Moral Education in Japan and Taiwan," ASIAN AND PACIFIC QUARTERLY OF CULTURAL AND SOCIAL AFFAIRS, X, No. 2 (Seoul, Korea: 1975).

Taiwan, as has been shown, is a society deeply rooted in the traditional culture of China, although it has experienced many changes in every aspect of cultural and social life since the founding of the Republic in 1911.

Confucianism, filial piety, harmonious living, and peace through complex relationships and moral virtues have always been emphasized in Chinese cultural life.

In 1929, the national government of China promulgated the moral goals of education in the following policy statement:

> In accordance with THE THREE PRINCIPLES OF THE PEOPLE, the purpose of Chinese education is to improve national living standards, to achieve mutual assistance, to develop national economic life, and to promote the cultural life of the nation, so that we may attain by all means, independence of the nation, democracy, a higher standard of living, and, in the end, advance to an ideal world where harmony and equality prevail (Hwa Tae Cho, 1975).

As seen from this quote, the goal of Chinese education is twofold: to develop in the student cognitive skills that will help him become part of society and, secondly, to enhance his moral virtues in eight areas--"loyalty, respect to parents, kindness, love, faith, righteousness, harmony, and peace" (Hwa Tae Cho, 1975). The reader will note that the goals of moral education are not dissimilar from the ideals about which Confucius spoke.

At each level in the educational system of modern Formosa, moral education is included. (It should be noted here that secular moral education is also a part of the curriculum of Japan, Korea, Singapore, and other nations that have their cultural roots in Chinese civilization.)

At the primary school level, moral education is taught as "Life and Ethics" and "Health Education." The pupil will take about twenty minutes of these subjects each day, usually early in the morning. In the last two years of the elementary school, grades five and six, "Life and Ethics" is taught for an additional forty minutes per week as a separate course.

The goals of the teaching of moral education at the primary level are to encourage good behavior patterns among children; to cultivate the sense of love, friendship, and respect for friends, family and the elderly, and to introduce the child to the more fundamental aspects of good citizenship and peaceful, harmonious living.

At the middle school level (grades seven through nine), moral education is taught for two hours per week and goes under the title of "Civics and Ethics." The goals of this course are to cultivate moral concepts, focusing on the traditional four values (property, justice, modesty, and conscience), and to promote moral behavior in all areas of life; to encourage the student to lead an orderly, safe, and public spirited life; to make students realize and respect human dignity; and to transmit and promote knowledge of the individual, family, society, nation, and the world. Family life, individual behavior, school life, society, nationalism, and a peaceful world are the six main domains of moral education at the middle school level.

When a child attends high school, he takes a course titled THE THREE PRINCIPLES OF THE PEOPLE (SAN MIN CHU-YI). The class is two hours each week, and it aims at instilling in the high school pupil traditional Chinese values of virtue and humility as well as the ideals expressed by the great Chinese philosophers, e.g., Confucius and Dr. Sun Yat-sen. Loyalty to one's nation and culture are also part of the curriculum of this high school level class.

To teach moral education, certain strategies are necessary. Textbooks are designed by the Ministry of Education, and all children in Taiwan use the same text and collateral reading material. The curriculum is prescribed by the Ministry of Education and implemented by the chief officers in each school.

Presently, moral education in Taiwan relies much on improving cognizance, and so there is always the problem of how to connect what is taught in the

classroom with the child's personal conduct. An effort is underway to subdivide the courses in moral education so that they will better correspond to the child's state of mental and intellectual development. It is hoped that this will encourage emotional acceptance of the contents by having students dramatize the subject matter.

The aim of moral education is to help pupils not only recognize virtues but to cultivate a moral sense and to help them become accustomed to the practice of virtues. In order to achieve this aim, it is necessary to repeat the teaching of moral virtues in connection with the whole life of pupils and to pay attention and make an effort constantly in close tripartite cooperation among teachers, children, and parents. Effective moral education is closely connected with the whole life experience of children, such as the social structure, the quality of teachers, the size of classes, the method of management of schools and classes, and home life.

As a means of supplementing the curriculum of moral education, co-curricular activities are utilized at times when the indirect method can produce a greater effect than the direct method. An even greater effect will be obtained if the teacher emphasizes and promotes the interrelation between the virtues taught in moral education classes and other subjects of study. Extracurricular activities are aimed at cultivating social adaptability in students and elevating their quality as citizens through their autonomous life experiences. Included are class activities, children's association movements, club activities and school functions. These extracurricular activities and school functions cultivate the quality of students as democratic and cooperative citizens, promote their spirit of service for national development, and help them develop their individual ability and lead a sound and rich life. As

students are easily influenced by atmosphere, these extracurricular activities are closely connected with the cultivation of their moral sense and practice of the virtues taught in the classroom (Hwa Tae Cho, 1975).

20. TEACHING METHODOLOGY IN THE MODERN HIGH SCHOOL

Teachers in modern Taiwan and in traditional China have historically been revered as an elite class; and, for much of Chinese history, the profession was dominated by men who had been themselves successful in the learning-examination system. The qualification for being a teacher in traditional pre-Republic China was to be screened through years of government tests, which, as has been pointed out earlier, required memorization and rote learning of the great literature of China. As a result, most of the teachers of traditional China demanded of their charges rote learning and strict obedience to the regulations governing proper behavior and filial piety.

The word for teacher in Chinese is "Xiang-Sheng," which denotes a person who is both a scholar and has the responsibility for moral training of the young. These two Chinese characters also suggest the possession of a warm and loving personality that is willing to nurture and guide.

During the Taiwan experience of the last 40 years, Chinese educators and theoreticians have struggled with the necessity of developing new and creative goals and objectives that would help bring about modernization of Taiwan and, after the turbulence of the last 100 years, the reconstruction of Chinese civilization. These goals, which are part of the agenda of the Taiwan high school, have been melded with the desire to retain the Confucian ethical past and the continuity of China's glorious history.

One of the fundamental differences in pedagogical philosophy in China compared to that of the West is the idea of transference-of-learning. Oriental educators generally believe that by studying mathematics or music, for example, a person will better be able to learn other subjects that may not appear directly related to these areas. The Chinese language, with its thousands of characters is seen as a way of strengthening the brain of the high school student and making him more scholarly in other areas of learning, particularly in computation and advanced science.

The Chinese are also convinced that learning is best accomplished as a group function and through the process of repetition. (Repetition begins very early in a child's education and is the only way to learn the Chinese language. This view of learning permeates all other subjects as well.)

Taiwan educationalists recognize that children have different levels of development; they believe that the slower high school child can be made more scholarly by having to keep up with his peers in a homogeneous group setting.

Teaching at the secondary level usually consists of formal lectures by teachers and meticulous note taking by the pupil. The student believes that the information given should be learned because: (1) The teacher is a "bank" of knowledge who is sharing his wisdom; and (2) the subject matter may appear on the school or national examination. Memorization, drill, and constant testing are the most common methods found in the Taiwan academic high school classroom for teaching most academic subjects. In recent years, efforts have been made to include discussion, experimentation, debate, self-exploration, and field-based learning into course material. Information-centered teaching is the best way to describe the Chinese practice of pedagogy, and this methodology is necessary to allow the student the opportunity to acquire the

knowledge required to pass the Joint College Entrance Examination. Students, when queried by this writer as to why they studied so diligently in high school, repeatedly indicated that it was necessary to pass the JCEE. Parents also expressed this view. Information-centered learning, therefore, is more important in Taiwan than either child-centered (as found in America) or teacher-centered (as found in Germany) techniques. Because teaching is information-centered, it is by nature markedly didactic, the teacher telling, transmitting in a generous yet authoritarian way and gearing much learning to the standardized textbooks.

In the academic high school there is no ability grouping. All children admitted have passed difficult examinations. Teachers can be quite sure that their charges are bright and eager to learn.

Certain classes are the exception to the lecture/note-taking format. Music, art, cooking, and crafts, all of which are part of the required curriculum, use a seminar or workshop approach to transmitting information. Perhaps the reason that this more libertarian modality is preferred in these classes is that the subject matter will not appear on the national Joint College Entrance Examination; therefore, teachers and students feel less pressure in acquiring information and are more apt to enjoy the more casual experience of learning. It should be mentioned that in these classes performance is measured and the grades do go on the students' report cards. Peer pressure to succeed in these courses appears to be the main ingredient for student maturation.

Though it might appear that the teaching/learning process of the schools is rigid and unfriendly, this is not the case. Research done by James C. Davis suggests that children have a warm and positive attachment to their class and their school. They feel very positive about their future potential

and are proud to be part of the continuum of Chinese education. The schools have also been able to instill in the students a sense of love of nature and the beauty of Taiwan. National leaders such as Dr. Sun Yat-sen (China's George Washington) are seen by students as important role models, and a deep pride in the Chinese way of life is fostered by the school system. (It should be noted that the sense of patriotism seems to peak in the junior high school years; it does remain important but becomes more balanced as the student goes to high school and college.)

The Chinese high school is to the people of Taiwan a symbol. School authorities take on the role of national leaders. As Richard W. Wilson indicates: "I would posit that the association with the principal and teacher /at the high school level/ is far more important with respect to learning about specific political /and cultural/ symbols than are parents, for school authorities are most closely associated with these symbols. Both parents and teachers provide generalized training in authority situations; but by the high school years, it is in the school, under the influence of the school authorities, that organized political /and cultural/ learning really begins" (R. W. Wilson, 1970, pp. 43-79).

Homework is a vital part of the learning process of the high school student in Taiwan.

Researchers in America have found recently what the Chinese have known for decades--that there is a near absolute relationship between a commitment to homework on the part of students, parents, and teachers and the potential success of the student. Dr. Amitai Etzioni, one of the most distinguished sociologists in the United States, has spent most of his life addressing issues related to education. Etzioni, formerly of Columbia University and now with George Washington University, found a strong correlation between

self-discipline on the part of students and the overall performance of the schools they attended, beginning with the required amount of homework assigned and completed. As Professor Etzioni stated, "Homework is an important measure of self-discipline because students must do it on a regular basis and without close supervision" (THE NEW YORK TIMES, November 1, 1983, p. C-1). Data collected by Etzioni suggests that students in "high performance" schools in both sectors "did considerably more homework than students in average schools." The researcher also found that a relationship exists between the self-directedness of the student and his future-orientedness and the degree he was willing to do homework. "Homework is the golden opportunity to develop self-discipline because you take it, you to to the library or a quiet corner of the house, and you bring it back," stated Etzioni. Homework also suggests that the school, teacher, parent, and student are working as a team and that students have begun "to rely on their own internal self-discipline." These points about American education are equally relevant to Taiwan's high schools and its students. The main qualifier is that a major concern exists on the part of educational authorities in Taiwan that high school pupils are doing too much homework and this may be jeopardizing their health and social development.

In recent years, education authorities have attempted to minimize by law the number of hours a child would do homework. Based on interviews with students, parents, and teachers, the amount of homework that a child does depends on three factors: (1) the nature of the course, (2) the socio-economic level of his parents, and (3) his grade level.

Children who are in grades 1-8 do between one and three hours of homework each evening and also on weekends. Younger children do less; but as they approach the eighth and ninth grades, homework becomes a more important

part of their lives. There is a general feeling that home study and outside tutoring will lead to a better chance of passing successfully the high school entrance examination that is given during the ninth grade and determines whether a child will continue his education in an academic setting. Parents will often hire tutors (many of whom are moonlighting teachers) to assist and drill their offspring.

Families of the middle class in Taiwan seem to have the greatest faith in relationship between homework and success in high school. Specifically, families that are associated with government jobs indicate that they see homework as the critical variable in their child's success. Poor families are concerned with the fundamentals of survival and the child's free time is usually devoted to chores and work. Wealthy families quite often express the desire for their children to enjoy the childhood experience through travel, socializing, and material possessions; and parents who are of the elite intellectual class (usually university professors in the arts, social sciences, and humanities) believe that homework is less necessary than developing positive social and cultural attitudes. Most of these scholars are quite critical of the draconian homework pattern required for success in Taiwan's academic high school (especially if they have studied abroad). The working middle class--which makes up the largest element of children in the academic high school--are advocates of long hours of homework, as are teachers, principals, personnel in the various branches of the centralized educational bureaucracy, and most students.

Homework is usually done at the school after hours. The academic high schools in Taiwan are kept open until late in the evening for study and extracurricular activities, and children will usually have a light supper and return for reading, research, or group drilling. Some students go to

the local libraries, and others who have a quiet area at home study at their house. Based on interviews, students study language and science most. The pattern of homework increases as the high school student nears his last year. It is quite normal for the 12th-grade high school student to study three to four hours each night and also attend special tutoring classes for three to five evenings per week. The last semester of the senior year a student will put in an average of five hours of homework study. This is the last phase before the young man or woman sits for the entrance examination for college, and no effort is too great to succeed in this vital quest.

It is impossible to quantify how this demanding schedule of school, homework, and tutoring affect the psychology and social awareness of the young in Taiwan. Educators are attempting to mitigate the situation, but the great demand for college education and the competitive process necessary to be admitted to the higher levels of learning seem to work against any liberalization of the existing system.

21. EXTRACURRICULAR ACTIVITIES AND THE SECONDARY SCHOOL STUDENT

Group activities tend to dominate the extracurricular activities of high school students. The Chinese, as with most Oriental peoples, enjoy participating in events and excursions that are group-oriented. Educational leaders in Taiwan recognize that the high school student is under great pressure by his school and his parents to achieve well in the academic domain. As a consequence, school- and government-sponsored events and excursions are an important part of the life of the high school student.

Extracurricular activities take the form of cultural events, sporting competition, social life, and field excursions. Because of the relatively small size of Taiwan, most students will go to the same places irrespective of what part of the island they reside in. Boy Scouts, Girl Scouts, and China Youth Corps (a national organization similar to our YM/YWCA with hostels throughout the island) are among the groups to which Chinese youth are required to belong.

Physical education programs require three hours a week, and the curriculum is structured and demanding. Besides the regular exercises that are performed as part of proper fitness, kung fu, shadow judo, gymnastics, and field and track events within the school are important. Dancing, marching, and a variety of ballgames also exist.

In the early morning before school, children often come to the high school campus and begin their day with invigorating games of basketball, volleyball, or badminton. The Chinese believe that early morning physical activity is an excellent way to begin the day. During the day exercise is built into the curriculum. Boys and girls at their respective schools wear gym uniforms for the physical education classes. Teachers who have taken advanced training in physical education lead these classes and are demanding of their charges. Most courses of this type meet outdoors and are not cancelled because of inclement weather. It is Chinese tradition that an academic mind and an athlete's body are complementary.

A unique feature of physical education in Taiwan is how children interested in a special activity often form their own group and then find someone to teach them the sport. Ping-Pong is of course a very popular and competitive activity. Most athletics are intramural; some are intermural and these draw the attention of the nation's newspapers and even television

news shows. The children of China are dedicated to athletic excellence and seldom will quit an activity even if they are certain of losing the event.

In addition to domestic competition, Taiwan encourages its youngsters of high school age to engage in sports that bring them into competition with foreign nations. At present, athletic games sponsored by the government include the Taiwan Area Games, the Taiwan Secondary School Athletic Games, ad infinitum.

Complementary to physical fitness is the emphasis placed on hygiene. Taiwan is now attempting to beautify its high schools through competition and awards and also to improve the kitchens, toilets, and water systems of the schools. Strict rules govern children's dress and hygiene and also their general health. All high school students must be examined periodically, and the focus of these examinations in recent years has emphasized the need for proper eye care.

In winter during the mid-year break, all upper level Chinese students in Taiwan high schools have the opportunity of joining groups that tour historical and recreational spots on the island. Most youngsters enjoy going to the mountain region where they can see snow for the first time; some even attempt to ski.

During the summer the government has a wide variety of programs for high school students. The most successful is the China Youth Corps, which has hostels in all parts of the island. These are for recreation and other group activities. Chinese cultural and social/political issues are quite often discussed during evening seminars. Religious activities do not play a role in the intellectual, social, or cultural life of the average Taiwan high school student. A clear and legal separation of church and state exists, and no discussion of religion may be held in any of the public schools of Formosa.

The most noteworthy event in the social life of high school students usually occurs during their senior year. This is the spring excursion. Students are packed into buses or on trains and go to some historical or scenic location with their classmates and teachers. The bus rides are filled with singing and music. The students look forward to these outings with keen anticipation and save for the cost of the trip. Often a class treasurer is appointed for this purpose. Most of the trips are low cost; but, if a child cannot afford to go, monies from other sources can usually be found. Generally, all seniors go, take many photographs, and remember this occasion as one of the most pleasant of their high school days. It also helps cement class ties, which have by the senior year become quite strong.

It is important to note at this point that a major extracurricular activity in which all able-bodied men and women must participate is military training. Though this only accounts for a small portion of the school week, it does encompass both physical fitness and mental alertness. (All young men after high school or college must spend 21 months in the military--which in Taiwan is similar to our National Guard.) Military training for boys is divided equally into classroom instruction and skill training, and courses offered include general military knowledge, basic training, weapons practice, basic combat training, and life education. Courses of military training for girls are divided equally between basic military knowledge and first-aid training (including family health training).

Incidentally, military training as part of personal physical fitness predates the Taiwan period of Chinese history. Like most other nations, the school as an agent of the state does have built into its mission military preparedness.

In summary, extracurricular activities are an important and integral part of the high school experience. They inculcate in the students a sense of Chinese culture; they teach the students group cooperation through athletic and cultural activities; they help the school monitor the health and welfare of its charges; and the extracurricular activities also develop in the young men and women of island China a feeling of groupness, cooperation, and friendship. Unlike in America, children are required to participate in these activities; and, when asked their feelings about this, they unanimously indicate that the extracurricular events of the school and those sponsored by the government are an excellent mechanism for relieving the tension of study and for developing new and close lifelong friendships.

22. EDUCATIONAL EXPENDITURES

The Constitution of Nationalist China, under which the school system of Taiwan functions, was promulgated in 1947. The centralized nature of Chinese education is addressed in this document, and special mention is given to the funding for public education. Taiwan today remains under the Constitution of 1947; but, because of the international difficulties, provisions of the Constitution have been held in abeyance. Article 164 of Chapter 5 of the 1947 Constitution defines quite clearly what the financial obligations are for the various levels of government for educational purposes:

> Funds are assigned for education. . .shall be in respect of the Central Government, not less than 15 per cent of the total national budget; in respect of the Provincial Government, not less than 25 per cent of the total Provincial budget; and in respect of the Municipal or County Government, not less than 35 per cent of the total Municipal or County budget.

While the central government has been unable to comply with the provision of the Constitution that requires it to contribute 15 percent of the national budget, the provincial and local levels of government in Taiwan have made up (in large measure) the deficit. These expenditures by the local governments have increased very rapidly as Taiwan's economy has grown and particularly since the compulsory nine-year educational paragon was put into effect in 1968.

Provincial funding for education, which is coordinated through the Department of Education of the Provincial Government, Taichung, Taiwan (Taipei and Kaohsiung are special national municipalities), are used mainly for all levels of provincial schools, provisional social education institutions, and allotted to public junior and national high schools directly administered by county governments for improving instruction. The total gross expenditures of the provincial government in the area of education in 1982 was 28 percent ("Education in Province Taiwan," 1982, p. 9).

Expenditures for education at the county level are primarily used to develop the nine-year compulsory education program, including the establishment of schools and classes, improvement of facilities, scholarships and allowances to students, free provision of textual material, and for various activities of social education and education administration.

Currently (1982-83) the educational expenditures of the total city budget is about 47 percent. This is down from the high mark of 56.41 percent, which occurred in 1967 when the nine-year program was implemented. Based on statistical information supplied by the Ministry of Education, secondary education (vocational and academic) receives 15.06 percent of the total education budget of Taiwan. This amounts to slightly over 6 percent of the GNP for the fiscal year 1983. Of the total educational budget of 100 percent usable funds, private education's commitment is 17.20 percent, while public education's allotment is 82.80 percent.

The high schools in Taiwan receive their funding from either the Provincial Department of Education or, in the case of Taipei and Kaohsiung (which, like Washington, D. C., are special districts under national government administration), from the District Bureau of Education. An elaborate formula is developed, based on student population at the school, teachers' and administrators' salaries, benefits, and capital expenditures, and the department of budget is allotted the funds earmarked for the specific school. Generally, there is little change in budgetary procedure from one year to the next; inflation and campital improvements as well as salary increases are factored into the new expenditure configuration.

Officials at the Taipei Bureau of Education did point to one slight problem. The very best high schools are located in Taipei City. As has been mentioned earlier, students are admitted to the high school by a competitive examination. If their scores are high, they may be able to attend one of the elite public high schools in Taipei City even though they live in a different part of the island. Arrangements are made to "board out" or live in school dormitories. The tax-paying citizens of Taipei have expressed concern that the portions of their taxes which go to education in Taipei (or Kaohsiung) are often used to educate children from other regions of Taiwan Province. Yet, as indicated by Dr. Mao Lian-Wen, Commissioner of the Bureau of Education for Taipei, many persons who work in Taiwan and live outside of the city benefit by not having to pay city taxes and yet are able to earn the relatively high wages of Taipei City; therefore, the situation created is quite balanced and equitable (from an interview with Dr. Mao). Taiwan does hope to increase its financial commitment to education and comply with the provisions of its Constitution. This, though, will have to await a more pacific international climate.

Below is a chart that reflects the educational expenditures in Taiwan from 1950 to 1983:

The Ratio of Educational Expenditures to GNP

Fiscal Year	GNP NT$1,000	Total Educational Expenditures					
		Total		Public		Private	
		NT$ 1,000	%	NT$ 1,000	%	NT$ 1,000	%
1951	12 315 000	213 082	1.73	213 082	1.73	...	...
1952	17 247 000	300 657	1.74	300 657	1.74	...	...
1953	22 988 000	352 964	1.54	352 964	1.54	...	...
Jan-Jun 1954	12 612 500	225 490	1.79	225 495	1.79	...	...
1954—55	27 656 500	580 104	2.10	580 104	2.10	...	...
1955—56	32 315 500	673 263	2.08	673 263	2.08	...	...
1956—57	37 417 000	844 838	2.26	844 838	2.26	...	...
1957—58	42 635 500	971 944	2.28	971 944	2.28	...	...
1958—59	48 462 500	1 200 969	2.48	1 100 036	2.27	100 933	0.21
1959—60	57 377 000	1 394 382	2.43	1 264 918	2.20	129 464	0.23
1960—61	66 548 500	1 671 962	2.51	1 470 169	2.21	201 793	0.30
1961—62	73 872 200	2 138 470	2.91	1 894 841	2.58	243 629	0.33
1962—63	82 571 500	2 551 437	3.09	2 221 611	2.69	329 826	0.40
1963—64	95 211 000	2 806 086	2.95	2 415 878	2.54	390 208	0.41
1964—65	108 058 000	3 152 342	2.92	2 580 612	2.39	571 730	0.53
1965—66	119 870 500	3 959 628	3.30	3 234 989	2.70	724 639	0.60
1966—67	136 108 000	4 578 272	3.36	3 735 793	2.74	842 479	0.62
1967—68	158 397 500	5 548 234	3.50	4 474 905	2.82	1 073 329	0.68
1968—69	183 244 500	7 347 494	4.01	6 105 948	3.33	1 241 546	0.68
1969—70	211 000 000	8 697 692	4.12	7 280 688	3.45	1 417 004	0.67
1970—71	243 930 000	[1] 1 236 766	4.61	9 065 121	3.72	2 171 645	0.89
1971—72	284 398 500	11 852 384	4.17	9 094 133	3.20	2 758 251	0.97
1972—73	347 972 000	12 505 683	3.59	9 722 589	2.79	2 783 094	0.80
1973—74	456 530 500	14 743 223	3.23	11 484 954	2.52	3 258 269	0.71
1974—75	540 580 500	21 046 637	3.90	16 738 643	3.10	4 325 994	0.80
1975—76	603 740 000	25 377 015	4.20	20 952 991	3.47	4 424 024	0.73
1976—77	690 916 000	30 855 390	4.47	25 337 875	3.67	5 517 515	0.80
1977—78	810 668 000	36 690 330	4.52	29 871 453	3.68	6 818 877	0.84
1978—79	1 067 229 000	43 269 554	4.06	35 480 093	3.32	7 789 461	0.73
1979—80	1 295 218 000	56 907 853	4.39	47 418 999	3.66	9 488 854	0.73
1980—81	1 574 118 000	74 112 577	4.71	60 262 157	3.83	13 850 420	0.88
1981—82	1 769 611 000	94 673 666	5.35	77 809 670	4.40	16 863 996	0.95
1982—83	1 900 427 000	110 942 492	5.84	91 864 372	4.84	19 078 120	1.00

(EDUCATIONAL STATISTICS, Taiwan, 1984)

23. HIGH SCHOOL ADMINISTRATIVE ORGANIZATION

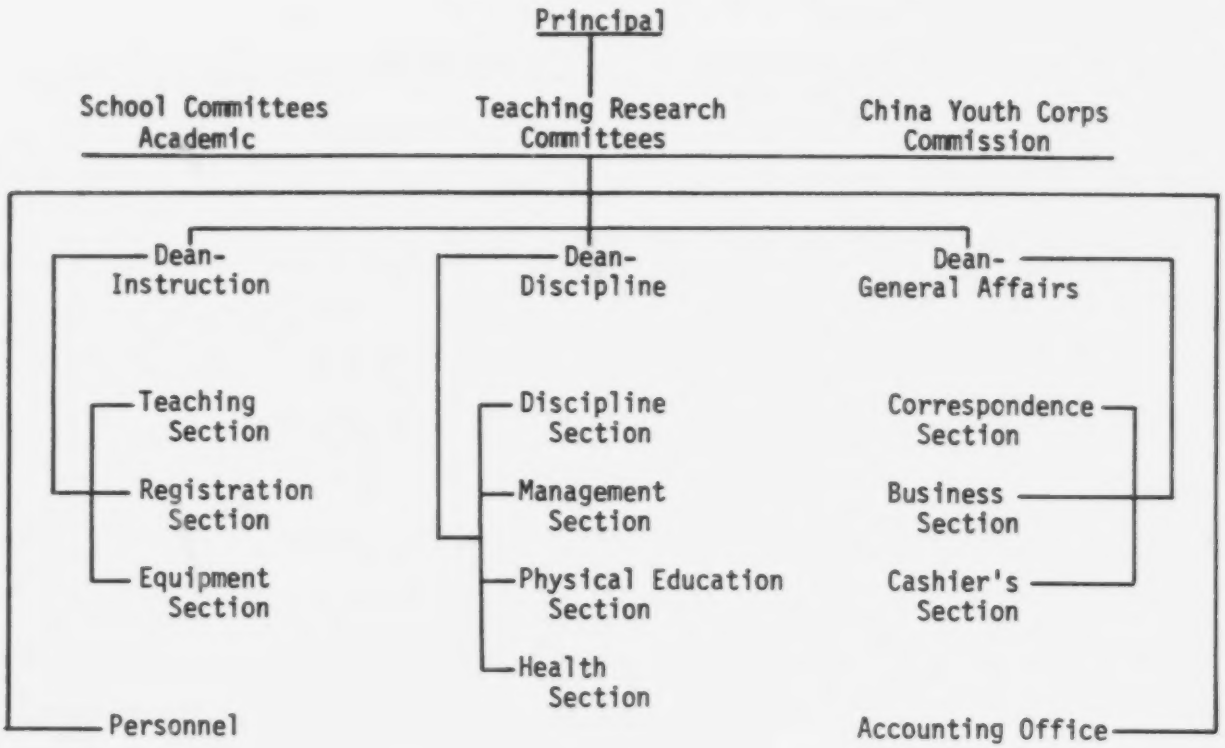
Centralization dominates all aspects of education in Formosa. Not only is this true of the central government, but also it is the case at the public and private high schools that dot island China. Perhaps the arrangement of the Chinese family with its patriarchal constellation of rule, which is reflected in the Chinese government, is the fundamental reason that schools, be they the most advanced university or high school, also have a strong centralized administrative organization. As one research suggests, the school is a place where the child learns not only subject matter, but the political and social mores of his society. The public and private high schools are arranged quite similarly to the government in Taiwan, and the principal takes on the symbolization of the head-of-state. We in the West may see this as incompatible with certain freedoms expected in American societies; the Chinese find this system most compatible with their heritage and the current sociology of Taiwan.

In this section, the administration of the Chinese high schools in Taiwan will be diagrammed. All high schools are arranged in quite the same fashion; and administrative duties are also the same, irrespective of where in Taiwan the high school is located. Consequently, a composite high school administrative model will be outlined; this is based on diagrams and position descriptions of five different academic high schools (public and private) which, though different in minor procedural matters, are essentially the same.

PROTOTYPICAL

ORGANIZATIONAL CHART:

THE CHINESE HIGH SCHOOL IN TAIWAN



In the private high schools, a board of trustees selects the principal and all other administrators, and teachers must be approved by this board. Further, in the public and private high schools, heading each division under the principal is a "dean" who has line authority and reports to the principal. Deans of instruction are usually from the field of teaching and have earned the respect of their peers and superiors through excellence in academic preparation and good human relations; the dean of discipline quite often is a retired military person who has taken advanced training in pedagogy and counseling; while the dean of general affairs is often from a background in finance or economics.

The main school administrator is the principal, generally an experienced and older educator who took the necessary postgraduate study to receive a government endorsement as a principal. The average age for a high school principal in Taiwan is about 55, and most have 20 years in public education. A majority have taken all or part of their education at National Taiwan Normal University in Taipei (the leading teachers college on the island). Interviews indicate that most principals are married and have three children who, like them, are in or plan to go into academic/civil service careers. The main duty of the principal is to provide advice and guidance to the teachers, attend to necessary paperwork, and assure a safe and healthy environment for students. He also symbolizes to the school and society the finer aspects of Chinese education through his behavior and energy. A principal, though given intensive workshop training to get his job, is not trained in managerial skills. Therefore, his advice is of necessity subjective; he is most comfortable giving orders or transmitting information from the Provincial Department of Education or the Ministry of Education.

The main duties of the high school principal can be seen as the following:

1. Representing the school with visitors, parents, and educational superiors.
2. Dealing with teachers and administrators in regard to personnel matters, such as grievances, inservice release time, class location, and scheduling concerns.
3. Working with parent groups and other civic organizations for the benefit of the school.
4. Assuring a safe, disciplined environment for learning.
5. Planning capital improvements in the school.
6. Opening the school day with speeches.
7. Overseeing the internal operations of the school, such as equipment orders, textbook dispersal.

8. Acting as advocate for the school with the governing bodies in the public or private sector.

In essence, the principal represents the link between the various constituents of society interested in the school, the educational hierarchy, and the school and its personnel and charges. He or she is responsible for the regularity of the school's educational work, its order, and everything that happens within the school building. The principal's responsibility extends over general administration, relations with the pupils and their parents, pupil evaluation, counseling and guiding the teachers as a group and individually, public relations, and school maintenance. He is a symbolic father figure for students, teachers, and parents, and has great respect in Chinese society in Taiwan.

Both the Ministry of Education and the Provincial Department of Education have supervisors/specialists and special unit division coordinators who work with the schools and who, like other staff persons, coordinate financial, curriculum, and personnel concerns for the central bureaucracy. The principal, however, retains ultimate authority in his school and sets the social, moral, and intellectual tempo for his campus.

24. EDUCATIVE ACCOUNTABILITY

Schools in Taiwan, and particularly the academic high school, are not held accountable in the American sense of the word. There are a variety of reasons for this. One is that most parents have never themselves been to an academic high school as students and therefore hold that institution in a good deal of awe. Mystique has always accompanied the higher levels of

learning in China, and this remains the case today in Taiwan. A second reason is, of course, the fact that income tax, property tax, and sales tax which pay for the high schools are not directly linked to the schools, as is the case in the United States. Rather, these monies go to the central government, which then administers the revenue in a manner that few outside of government understand. Another reason is that schools and school districts or counties with their localized interest groups do not exist. Education is seen, correctly, as a national venture on an equal footing with national defense. There is in Taiwan an indifference to the administration of schools and how they are funded. These domains of responsibility are seen to be the purview of the government and persons trained in education. Though there is an indifference to how the overall system works, parents are by no means indifferent to how their children perform. While the American public blames the school or teacher for a child's failures, the Chinese parent in Taiwan pins the blame on the child for not working diligently or for not becoming part of the group. For these reasons, as well as historical precedent, there are not strong pressures on the public high schools in Taiwan to be accountable.

One could suggest that parents and educators are contented with the educational system and see change to a more democratic model as contrary to the basic principles of Chinese educational thought. And as long as the Ministry of Education and the other departments and bureaus of educational administration continue to promote open, competitive, and fair educational opportunities, there is unlikely to be any challenge to the academic-ocracy that currently prevails.

25. THE FACULTY AND THE CHINESE HIGH SCHOOL

To many, teaching is a sacred calling. This is not the case in America today; it remains prevalent in modern Taiwan.

In this section, the life of the high school teacher will be discussed from pre-service training through retirement.

A distinct teaching shortage faced Taiwan in the 1950's due to international problems, the vacuous situation created by the expulsion of the Japanese in 1945-46, the desire of the national government to make Taiwan a model for all Chinese people, and a variety of economic problems. Teachers were recruited from a variety of sources. Many ex-servicemen found their way into the profession; and individuals with good educations, limited employment prospects, and no training in modern pedagogy were frequently hired.

Today teachers in Taiwan are among the best trained in their profession in any developed Eastern or Western nation.

The preparation of secondary school teachers in modern Taiwan is centralized under rules and regulations set forth by the Ministry of Education.* While primary school teachers must attend one of the nine junior normal colleges on the island, secondary teachers have greater latitude in their formal pedagogic preparation. Generally, there are five tracks that may be followed. First, Taiwan has three prestigious institutions that have as their fundamental mission the pre-service education for men and women who choose to

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*Portions of this section on the preparations of teachers in Taiwan appeared in different form in the writer's previous book, IN THE IMAGE OF CONFUCIUS (1983).

teach grades 7-12 or who wish eventually to enter the field of college teaching. These government-supported colleges are National Taiwan Normal University in Taipei (NTNU), Kaohsiung Teachers College in the austral part of Taiwan, and National Taiwan College of Education located in the community of Chang-hwa, which is on the outskirts of Taichung in the central part of the island. All of these schools offer four-year baccalaureate programs which require 128 credit hours of course work. Upon completion of a fifth year of student teaching, the graduate of these three sthenic institutions are given certification as well as a position in the secondary schools or colleges of Taiwan (depending on personnel needs). These degree-granting institutions produce the preponderance of teachers for the middle and tertiary schools in Taiwan.

All expenses are paid by the government for students who are admitted to these day schools. It should be noted that admission is predicated on successfully passing the regular Joint College Entrance Examination (JCEE). Competition to any of these demotic schools is fierce, and National Taiwan Normal University is often a student's first choice of all colleges. This unique institution is the finest university in all of Asia that has as its primary mission the preparation of pedagogues.

All of these teachers colleges also offer evening programs in education-related fields. Admission to evening school--which is academically quite the same as day school--depends on successfully passing the JCEE. Students are not given government grants for attendance and therefore must pay their own tuition, book costs, and housing and food expenses. Conversely, the graduates of the five-year evening B.A. program at one of these three schools is not obligated, as are the day students, to serve as public secondary teachers for five years. Many do choose a life in education; others will move into other fields of endeavor.

The third route to becoming a teacher in the secondary schools of Taiwan is to take a regular B.A. degree from one of Taiwan's 24 non-teacher public and private colleges and universities and then take another 20 credit hours of postgraduate education courses at one of the three schools aforementioned. The opportunities for this method of moving into teaching are rather slim; private secondary schools often will hire students from this type of twofold program. In these cases the students are required to pay for their education and materials, and the government has no assured policy to find placement for students who have not taken the regular pre-service teacher education program.

The fourth major means by which a young person may become a secondary school teacher is to attend a government university that has a publicly supported department of education. The most notable one is Cheng-Chi University, located in the far suburbs of Taipei. This school has been given the right to offer a limited number of students admission into the department of teacher education. Only fifty percent of the students in this agonistic department are on government subsidies; the others must cover their own expenses. Those who are supported by the government are required to teach for the equal number of years that they were subsidized.

A fifth method is used by a small number of persons to gain secondary certification. A teacher who has finished the five-year junior normal college program and has also completed successfully five or more years of teaching in public school may be nominated for admission into one of the three baccalaureate level teachers colleges. If accepted, the student need not take the JCEE; his status is that of a sophomore; and, upon graduating with his B.A., he is required to serve in the secondary schools for a number of years equal to the government subsidy. Some students pay their own way and do not have to repay the government through teaching services.

Generally, these five models and variations are the conduits that a young man or woman must follow in order to become a teacher in grades 7-12 in Taiwan. One problem educationalists point out is that the routes to becoming a secondary teacher are quite different and a more standardized approach may be in the best interest of teacher morale and pedagogic training. Professor Chyu, Li-ho in his critical article on Taiwan's secondary teacher preparation program, "Secondary Teacher Education" (in Chinese only, referred to henceforth as the Chyu Report, 1977), points out in great detail the problems associated with the multifaceted approach to teacher education at the tertiary level. Though Professor Chyu has done a commendable job of analysis, this writer suggests that his criticisms are perhaps too strong, particularly when Professor Chyu attempts to equate violence in Taiwan's high schools (which is very rare and isolated) and the fact that there is no single track for the preparation of secondary teachers. Complexities such as urbanization, influences from Japan and America, and the mobility of the people of Taiwan are the main reasons for the few cases of vandalism that have been noted, and dealt with, in Taipei's and Kaohsiung's urban high schools.

The early history of colleges for the preparation of secondary teachers follows closely that of primary teachers. Secondary pre-service education, however, is also modeled more on the concept of the academy. That is, the emphasis has always been more towards academic excellence; it has been felt, historically, that courses in the science of education should play a relatively limited role in the education of secondary school teachers. Taiwan's policy of pre-service education for all teachers, grades 1-2, is firmly under government supervision and thus is the main difference that can be pointed out if one wishes to compare the educational programs in America with those of Taiwan.

The Ministry of Education, specifically the Division of Pre-service Secondary Education, has line authority over all aspects of curriculum, personnel, funding, construction, libraries, and placement. This division, which is made up of scholars who themselves were educators and experienced in teacher education, will often form committees of college professors, presidents, and key government leaders when formulating policy or reorganization. (This writer was impressed with the open communication that appears to take place among all educational authorities and scholars in Taiwan.) Disagreements are not uncommon; however, once a decision has been reached by the committee process and that decision has been sanctioned by the Ministry of Education, all administrators and professors tend to accept it as a fait accompli. Further disagreement is ended, and the education structure incorporates said policy until such time as it appears counterproductive to the central mission of the teachers colleges of the island.

Currently in Taiwan there are some 14,000 secondary academic teachers. A majority (65 percent) hold the bachelor's degree, some 25 percent hold professional (pre-B.A.) diplomas, 0.50 percent hold the master's degree, and 6.74 percent have the high school diploma. The remainder have certificates or diplomas from other education settings. Those without the B.A. or M.A. degree normally teach in either the junior high school (7-9) or are specialists in a vocational field and are employed in the field of secondary vocational-technical high school training.

The content of teacher education for secondary school teachers in Taiwan is quite similar for all students who select this profession as their life-time career. It is assumed that teachers need a combination of interrelated cosupportive learning experiences and curricula to be fully prepared in this

most important profession. Four general areas of emphasis are the foundation of the pre-service secondary education colleges: (1) general education (20 percent), (2) specialized education (60 percent of course work), (3) pedagogical training (20 percent), and (4) education foundations (courses integrated into other areas).

The training of teachers in the aforementioned method creates a commitment to that profession. Statistics suggest that 80 percent of the women who take their education in the field of pedagogy remain in teaching if they continue to be employed, and nearly 70 percent of the men choose to stay in education. Those who leave teaching usually do so for economic reasons and move into business, industry, or migrate abroad.

High school teachers receive a variety of benefits that accompany their positions. One of the intangibles is prestige. The high school pedagogue, like his colleague at the junior college or college, is seen as the catalyst for learning and success. Oriental tradition has always honored educators: The view is widely held that a teacher can make it possible for a child to become anything that he or she wants and that the teaching/learning process is the most available channel for any child to be successful. Consequently, high school teachers in Taiwan are viewed with reverence and respect. This is also seen in the remuneration they receive for their services.

Remuneration standards for teachers at public and private high schools are generally similar, though the salary and benefits of private school teachers may vary according to the financial resources of each private institution. Teachers are viewed as public civil servants, and their salary scale is fixed in accordance with the pay of all public functionaries. Taiwan does attempt to pay respect to the time-honored profession and high social status of pedagogues to encourage the best persons to enter and remain in that

profession. As a consequence, a government research allowance is given to teachers, and special time off is also made available for job-related training.

Remuneration for high school teachers is divided into two parts, salary and rations. The salary is related to the person's years of experience, education, and duties. Unmarried teachers are also given housing in dormitories, often found adjacent to schools. The ration part of the benefits includes rice, edible oil, salt, and fuel. The amount of the ration depends on whether the teacher is single or married and has children.

It is always difficult to determine a person's salary if the currency is different from what is found in this country. Based on the United States money system, a high school teacher (with 10 years experience and a B.A. degree) earns about US$500 each month. In purchasing power in Taiwan society, this equals about US$1,000 monthly. Teachers have the added advantage of not being required to pay income tax--a feature to which no other occupation in Taiwan is entitled. Teachers, upon retirement after a full career, are entitled to either a single lump sum or monthly salary checks for the remainder of their lives. The amount of these monthly payments and other benefits is nearly 75 percent of their regular salary, inclusive. A free insurance plan, health package, and disaster relief fund exists for teachers, as do benefit funds for survivors. Loans for personal housing can be secured at interest rates far below what banks or mortgage companies would charge, and vacation hostels for educators are available in the scenic areas of Taiwan.

Administered by the Taiwan Federation for Public Secondary and Primary School Teachers, an organization founded in 1959, these fringe benefits make the profession of teaching in a high school quite desirable. Add to this

the security of the job and the opportunities to make a contribution to the reconstruction of Chinese culture, and it is easily understood why teachers in Taiwan's high schools regard their place in society as important and the nation sees them as vital for its future development.

Below is a statistical profile of secondary school teachers in the academic high school in Taiwan, their education, ages, years of service, and the type of certification they hold (EDUCATIONAL STATISTICS, 1983, p. 74).

Secondary School Teachers in Academic High Schools in Taiwan

Total Number of Teachers, 1983-84		13,156
Educational Background	Graduate School	624
	College and University	9,828
	Junior College	1,470
	Military Academy	850
	Others	384
Qualification	Certificated for Teaching Subjects	10,353
	Certificated for Related Subjects	596
	Certificated for Other Subjects	525
	Non-certificated	1,682
Age Group	Under Age 25	819
	25--	2,880
	30--	2,882
	35--	2,080
	40--	1,505
	45--	883
	50--	850
	55--	820
	60--	395
	65 and Over	42
Length of Teaching	Under 5 Years	3,811
	5--	3,049
	10--	2,643
	15--	1,514
	20--	969
	25--	557
	30 Years and Over	613

26. FACILITIES, SCHOOL ENVIRONMENT, AND "CRAM SCHOOLS"

When one visits an academic high school in Taiwan, he notices first the neatness and cleanliness of the facility. Because the high school experience is so important to Chinese youth who have been able to pass the highly competitive entrance examination, great pride is taken in being a high school student. This is evidenced by the lack of graffiti on walls and the fast paced orderliness that accompanies the high school. There are currently 176 public and private senior academic high schools in Taiwan.

Early in the morning (usually at 7:00 a.m.) and again at day's end (4:15 to 4:30 p.m.), students from each class, grades 10 through 12, sweep the halls, wash tables and desks, and pick up litter that has been left on the high school grounds. A regular maintenance team is employed by the facility; however, it is part of the obligation of all high school students to keep their learning environment neat, clean, and symbolic of the orderly process that is the essence of the structured academic high school.

Most high schools are quite similar in design. A large high stone wall or fence surrounds green lawns. The buildings open to an outdoor court in the center of the square building design which consists of classrooms, the library, dormitories, cafeteria, and book/supply store. This large field is used for morning lectures, sporting events, and various assemblies. The facilities built during the Japanese occupation of Taiwan generally are constructed of red brick; those built during the last 40 years are made of concrete and are gray or brown. Classes seat 40 students, which is quite average for a lecture class, and are self-contained. Students change rooms, as do teachers, each 50 minutes. In many of the newer schools, the classroom opens directly onto the central field; this has allowed for the elimination of hallways and other non-essential space. Because of the mild climate found

in Taiwan, it is unusual to find air conditioning in the regular classroom, though teachers' central offices and the princpal's office are generally air-conditioned, as is the library and the office of the guidance counselor. No heating system is present in the schools.

At the front gate of all schools is a statue of a famous Chinese scholar or statesman. The national flag is usually seen in the central courtyard and is raised each day at 7:45 a.m. and lowered at 4:00 p.m.

Buildings are utilitarian in design. Seldom in the newer schools does one see unnecessary or elaborate architecture or unused space. The average number of high school students per school in Taiwan is near 3,000, with some high schools housing as many as 6,000 commuting students. There are currently 190,500 high school students on the island. In some few cases, dormitories are on the campus for teachers and also for overseas Chinese who chose to return to Taiwan for their education.

Schools differ in design, yet they are all constructed for utilitarian purposes. Educational leaders in Taiwan emphasize that the design of the school building is secondary to the learning, teaching, research, and moral development of the pupils who attend the school.

An important feature of high school education in Taiwan is the "extra school" or "cram institute," which now abounds.

There is great pressure from parents and also from the student himself to be accepted at a prestigious academic high school. As was previously mentioned, admission into an academic high school is predicated on successfully passing the National High School Entrance Examination which is given each spring. For those students who successfully complete this test and attend an academic high school, there is another, even more draconian

examination: the Joint College Entrance Examination, which is given nationwide each summer. Passing this test entitles one to be admitted to one of the 105 public/private universities, colleges, and two-year and three-year junior colleges in Taiwan. Only about 27 percent of those who graduate from an academic high school have this privilege, and only about 71,000 of the 348,941 who graduated from the national junior high schools were accepted into an academic high school in 1984. These numbers suggest the competitiveness of the education system in Taiwan and the selectivity of the high schools and colleges. This, complemented by the fact that education is the main conduit for economic and social success in Taiwan, helps one develop a picture of how important acceptance into a college or academic high school is to the pupils of the island republic.

High school students, as well as their junior high school counterparts, spend hundreds of hours each semester in "cram or evening schools" that are outside of the regular institutional framework. Quite often these unique places are staffed by teachers who are moonlighting or by college professors, businessmen, or recent university graduates, graduate students, and even gifted high school students. Their purpose is to help the high school juniors and seniors (or eighth- and ninth-grade students) prepare for the examination which will allow them to be admitted to a college or university. Government regulations require that teachers may not tutor their own students, and also specific hours of work time are spelled out. Conversations with educators suggest that few of these regulations are enforceable.

The "cram" schools meet after the regular school day and will quite often continue until 10:00-10:30 p.m. (Students in the cities of Taiwan are frequent users of public transportation late into the evening. There is virtually no random crime in Taiwan.) Parents pay between US$2 and US$5 per

hour for these cram tutoring sessions, which focus on materials most likely to appear in some form on the examination. The teaching method is lecture, review, private tutorial sessions, and recitation. When one visits a "cram" school, one is immediately taken by the excitement and determination with which the students are working. These cram schools reach their crescendo of activity from January to June when seniors are making their final efforts to prepare for the JCEE. It is not unusual for a high school student to attend school for six days a week, 7:40 a.m. to 4:00 p.m., and attend cram school from 6:00 to 10:00 p.m. after his regular school day.

High school students are often ill during this period from the stress placed on them in anticipation of the examination; their eyesight is affected, and they are seldom able to get adequate sleep. Yet this system does provide for all young people in Taiwan an equal chance to enter a higher level of education and, thence, be entitled to the rights and privileges that accompany this specialness that is unique to students in Oriental countries.

A variation of the aforementioned evening cram school is the year-long "examination preparation institute." It is not unusual for a talented junior high school or high school student to do poorly on the high school examination or the JCEE. These tests are only given once yearly, and a person's educational future rests on successfully passing them. Quite frequently a student will pass the examinations, but with a score lower than he had anticipated. As a consequence, he will be assigned to an academic high school or university or college which was not one of his first choices.

These students may take the examination a second time after remaining out of school for one year. During this 12-month interval, many of these young men and women register as fulltime students in the numerous private examination preparatory institutes. Tuition is relatively high (much higher

than the public high school and, in some cases, higher than the private high schools of Taiwan).

Classes begin before 8:00 a.m. and continue until 9:00 or 10:00 p.m. Emphasis is placed on reviewing materials covered in the regular school, cramming for the forthcoming examination, and taking "trial" examinations to develop the proper psychology and rhythm for the regular examination. Questions from former national examinations are made available to the student so he can develop some idea about the best way to prepare. Though these schools are not under government control, they are licensed as businesses and therefore must abide by regulations governing proper business practices.

Professor Theodore Chen of the University of Southern California, a noted Taiwan expert, makes this observation about the emphasis on competition, cramming, and special study practices:

> The success of academic education in Taiwan has brought perplexing problems. Competition is keen on all levels of the school system, and the pressure for success is great. Out of this situation has risen a prevalent practice of intensive study which is actually no more than feverishly cramming for examinations. Bearing the euphemistic name of "review lessons" or "supplementary study," the process of cramming starts with elementary school pupils and has become a major activity throughout the schooling years. Parents worry about the health effects of such after-school cramming sessions day in and day out. The limitation of allotted space permits only a passing mention of these problems. Suffice it to say that newspapers, forums of teachers, parents, and educators, and articles in journals have joined in a chorus of demand for reforms. There are many other problems of education that cry out for urgent reform. Some of them grew out of the very success achieved in the last three decades. Many suggestions have been made for changes and adjustments in the light of the new social-economic-political conditions. It is encouraging to note that the public is aroused and much concerned about education and that the complaints and proposals for reform are openly aired in forums and in current literature (THE TAIWAN EXPERIENCE, 1981, p. 76).

27. HIGH SCHOOL ENTRANCE EXAMINATION REFORM: 1984-1985

Educators at the various universities of Taiwan, and also at the Ministry of Education, indicate that the academic high school is geared to prepare youngsters for the complexities of life and that its multifaceted mission is social, educational, moral, and cultural.

Students who are attending the academic high school in Taiwan have another vision of their reason for being there. As one 18-year-old senior level girl mentioned, "The reason that I study so hard and give up so much is so that I can pass the college entrance examination and go to a decent university" (Wesley Girls' School senior). This different view of the high school experience is also reflected in comments made by parents and teachers. In public forums, teachers are pleased to point out that the high school is an excellent opportunity for students to experience the pleasures of learning and to develop positive lifelong habits and friendships. Privately, teachers are alarmed at how much time and effort students put into mastering materials that might appear on the Joint College Entrance Examination. Parents in Taiwan also are concerned with the rigorous system of education at the high school level that requires their progeny to spend innumerable hours studying after school in "cram institutes" or in the quiet of their rooms.

At the center of this feverish pitch of preparation lies the Joint College Entrance Examination. This test, given once each year in the summer, is the only way for the youngsters of Taiwan to be admitted to one of the 105 universities, colleges, evening colleges, or three-year or two-year junior colleges.

The Ministry of Education controls firmly all colleges and universities, private and public, in Formosa. A school must have full approval from the Ministry of Education before it can open its doors to students. Even foreign

universities are prohibited from offering college or graduate degrees without the full support of the Ministry of Education, which guards its prerogatives very carefully.

China expert James C. Hsiung points out why such tight control over higher education in Taiwan has come about.

> In the first decade of the Republic of China (1912-1922), public education was poorly financed and badly administered. Private education played a dominant role and private schools and colleges, with few exceptions such as the prestigious Peking University, were the best and most highly respected educational institutions in the country. At the same time, there were private schools which existed merely as commercial or business enterprises or schools which were diploma mills, at best. To bring order out of chaos and to prevent the abuse of educational privileges, it was necessary to place all private education under strict government control. One purpose of control and supervision was to make sure that all private and public schools followed the same regulations. To rectify the chaos and abuses, the regulations tended to emphasize restrictions and demand uniformity and there was little evidence of serious consideration of the positive role of private education in the long-range program of national education (THE TAIWAN EXPERIENCE, 1981, pp. 74-75).

In the early years of the Taiwan experience, 1945-1960, there was some replication of the difficulties that Dr. Hsiung points out, and it was necessary for the Ministry of Education to prevent reckless entrepreneurs from exploiting the education-hungry youth of Formosa.

This situation has changed today in many positive ways with both public and private schools under the auspices of the Ministry of Education.

With the clearly defined centralized education system, the Ministry of Education has been able to use the JCEE as a device to allow the most capable students to attend higher education institutions. Of the 97,000 who sat for this test in the summer of 1984, some 27,500 passed the examination and were admitted to one of the publicly supported or sanctioned institutions of higher education in Taiwan. These figures suggest the competitiveness that is associated with a college or university education in Taiwan or, for that matter, in any of the societies of the Orient.

It was in 1954 that the Ministry of Education initiated throughout Taiwan Province the Joint College Entrance Examination. Prior to 1954, each school had its own system for admitting students. Plagued with problems of favoritism and financial favors, the central government stepped into the vacuum. As was suggested earlier in this study, an examination continuum has existed in China since the Tang Dynasty. Numerous changes have taken place in the examination system over the years; but the ideal of an open, fairly administered, and objectively scored examination has been and continues to be part of China's educational legacy.

In this section a brief review of the JCEE will be presented. Further, a discussion of the new rules and regulations promulgated in 1984 and implemented in the summer of that year will also be addressed. It is important to note that even the harshest critics of education in Taiwan are quick to point out that the JCEE, with all of the pressures, despair, and enthusiasm it produces in the young, is administered fairly and honestly; and even the richest parent or the most powerful governmental official is unable to influence the examination process.

The system allows the potential university or college aspirant to take one national entrance examination, usually in the summer immediately following his/her graduation from high school. The examination is scored under the direction of the Ministry of Education, which then informs the student what universities and what major subjects he may study. The Ministry of Education also has the unpleasant duty of informing some youngsters (about 72 percent of those who have competed for admission) that they have not been accepted at any college or university.

From 1954-1984, the JCEE was divided into four groups: Group A - Natural sciences and engineering; Group B - Humanities and literature; Group C - Biological, agricultural and medical sciences; and Group D - Social sciences,

business, and law. Depending on a student's high school background and also his choice of a subject area to study, the particular examination covering the specific subject field would be taken.

There is also a general information portion on the JCEE which includes the following subjects: Chinese, literature, English, San Min Chu-yi, mathematics. Depending on one's choice of subject fields, other topics may also be required, such as physics, chemistry, general history, geography, and biology.

Through the application procedure for being admitted to one of Taiwan's colleges and universities, the candidate applies for admission to both a department subject area and to a school. These are placed in rank order.* (Prior to 1984, when they made application to take the JCEE, most students indicated on their forms a number of schools as well as subjects that they wished to study.) Candidates' names, based on the score which they achieve on the JCEE, are ranked within the four previously mentioned groups. Once the Ministry of Education has graded and evaluated all of the test results, candidates are notified by mail and also on large public posters as to what university they have been admitted and what their area of study will be. Those who have done best on the JCEE will be rewarded by being admitted to the department and university of their choice; most will be admitted based on a choice other than their first. Once admission to a particular department in a particular university, college, or junior college is closed, candidates are then placed in their second choice, and so on, until all vacancies at all departments and at all institutions are filled. In 1983, about 28 percent of the candidates who sat for the JCEE were admitted to some institution of higher education.

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*This section is applicable to the examination as it existed prior to the summer of 1984.

This writer was interested in how a student who was not given his top choice of department or university could be satisfied with studying in a field and at a university that might rank, say, ten and seven, respectively. As one Chinese sociologist pointed out: "There were about 100,000 young people who took the examination. Only 28 percent were admitted to college. There are 72,000 youngsters out there who were not accepted and who would eagerly change places with anyone who chose to drop out or not attend" (Smith, 1978, p. 8).

The highly selective admissions policy that high school graduates must face to attend a university or college assures the administrators, professors, and financial assistance offices of Taiwan's institutions that entrants are indeed prepared to do college work and have finely honed study habits, reading abilities, and computation skills. While 25 percent of all entering freshmen in the United States (1984) had to take remedial education in mathematics and English, such programs (which are both terribly expensive and often of questionable efficacy) are found unnecessary in Taiwan because of the academic Darwinism of the high school and the competitive selectivity of the JCEE.

The summer months are times of great excitement for the high school graduate, for it is during these months that he sits for the JCEE. The locations are announced and proctored by educators who receive a small stipend from the Ministry of Education. Seats are assigned, and students must preregister and show a recent I. D. card that has their photograph laminated to it. (One of the most popular ways to cheat on this test is to have a friend who is a freshman at an excellent university take the test for the less bright high school student.)

The first JCEE administered each summer is for entrance into four-year degree-granting universities and colleges as regular daytime students (some

of whom may take an evening class if it is appropriate to the BA/BS degree). Students who do not pass this examination, or who pass but cannot be placed in the institution of their preference, or who are put into a department in which they have only slight interest may do one of two things: (1) Sit out a year and take the examination over after attending a "cram institute," or (2) apply for and take a second entrance examination for admission to the evening school of a four-year institution. These programs, which are five years in duration and not as prestigious as the day-school degree program, are generally of the same academic standards as the regular courses of study. The procedure for placement according to ranking of students' scores is identical to that of day-school applicants.

Two other examinations are also given. These are for application to the three-year college (which does give a certificate but not the B.A. degree) and the two-year business, technical, or vocational junior college. These schools, which also have evening programs, use the same procedures for admissions as is used in the traditional degree-granting institutions. Be they public or private, the schools that offer higher education programs in Taiwan fall under the rules and regulations of the Ministry of Education.

Eligibility for admission to a public university or college day-school program means attaining the highest score on the JCEE. The test has a top score of 700. In addition to meeting the minimum score on the JCEE to be admitted to a university and also department, students in some cases must meet additional requirements placed on them by particular departments at the institutions.

The Ministry of Education has made every effort to keep the examination system fair and open. Rules are published, and the cut off score for various universities and departments are made part of the public record. For example, a student who took the JCEE in Group A in 1982 would have had to acquire a

score of 462 to be accepted into National Taiwan University's Department of Electrical Engineering. To be accepted into the same department at Fu Yen Catholic University, an excellent yet less competitive private school, the candidate would need a score of about 366. This process is used for admission of all students who have been accepted at a day or evening program at a university, college, three-year institute, or junior college. It should be noted that there is coincidental consistency in achieved score and the requirement for admission among different universities or in departments within universities.

The Ministry of Education, using students' lists of priorities of schools and departments, is able to determine what schools and fields of study are most popular and competitive and then adjust the required score accordingly. Each department and all institutions have ceilings placed on them for incoming freshmen. The Ministry of Education can also use the entrance examination score to direct more students into certain specific fields of study if it is felt that these areas will be beneficial to the society in the future.

Chien-Lou Hwang, writing in an article titled "The Joint Entrance Examination of Universities and Colleges in the Republic of China," points to the following difficulties that are implicit in the examination system:

> 1. Of the approximately 100,000 students who sit for the examination each year, only about 25 percent are admitted to the country's 26 four-year colleges and universities as day students. The remaining 75 percent of the applicants must be relegated to the evening schools at these four-year institutions or to the junior colleges.
>
> 2. The various components of the JCEE are essentially achievement tests based on instruction within the educational system in previous years; such tests have not been standardized.
>
> 3. Teachers at the senior high schools are teaching for the examination rather than teaching according to the guidelines established.
>
> 4. Although students may be fortunate enough to be admitted to schools of their choosing, many are not admitted to the departments of their top preference. This situation is due partly to the students, who feel that by listing several departments on their applications they will have a better chance of gaining admission somewhere to study something.

5. Students report that even though they were admitted to the department and the school of their choice, they soon realize that the subject area was not what they expected it to be or that the area of study was not suited to them. There appears to be a lack of proper counseling, guidance, and/or aptitude testing to enable students to make appropriate choices of majors and careers.

6. Once a student has been admitted to a particular department within an institution, he or she is expected to pursue the prescribed course of study. A student wishing to change majors and transfer to another department must do so after having his or her college entrance examination score reviewed by officials of the Ministry of Education.

7. If graduates of three-year junior colleges what to transfer to a four-year university or college, they are required to drop back one to two years when admitted to the higher institution. If the university has a similar department and curriculum from which the junior college student graduated, the student drops back only one year; where there is no similar departmental or curricular offering, the student drops back two years. The intent of this process is to require that the student enter a class at his or her own level, to fulfill prerequisite courses that other students in that same department are currently taking (J. A. Lee, 1982, pp. 72-73).

It was because of criticisms of this type and many more leveled at the examination system and the high school educative program that the new high school curriculum, which has been previously mentioned, was implemented in the summer of 1984.

To improve the Joint College Entrance Examination, a major effort was also initiated. Chaired by Dr. K. W. Mei, President of Tunghai University in Taichung (considered by many to be the best private school in Taiwan), a committee of five distinguished educators came together periodically for two years to try to make the JCEE more appropriate to the high school experience and also less a traumatic experience for the participants and their families. Pressure from high school level educators and personnel in the Ministry of Education had been building in Taiwan in the 1970's to redesign the JCEE. In the summer of 1984, the new JCEE was administered for the first time. In most ways identical to the pre-1984 test, the new examination does address some of the main concerns that had been forthcoming over the years.

According to Dr. Mei, with whom this writer spent many hours in conversation, the main complaints expressed were: (1) Students have too narrow a choice in their future career aspirations. They must study in either the field of science or social science/humanities. (2) Students do not have a good sense of what fields they should apply to, so they apply to everything that is available under one of the four categories. (3) The student has no idea which university will accept him, so all students list the same schools--from the very best to the less competitive--on their pre-examination form. As Dr. Mei stated, "The students used a shotgun approach in applying to colleges and to departments. The JCEE puts the high school student in a situation in which he is studying only for the examination; this hurts his whole high school experience."

From 1982 till 1984, the committee chaired by Dr. Mei met, and in the spring of 1984 presented formally its recommendation for revisions in the JCEE. As the examination now stands, a student may choose from ten categories, and not the original four. The student may take an examination in any of the ten categories for which he has academic preparation. Though most students will only take tests in three or four areas, in theory, a student could take as many as ten. Also, when admitting students, the university or college now may put emphasis on grades received in high school if all other factors are essentially equal. (The prestige of the high school is not considered when grades are reviewed.) Lastly, the student is not required to fill out the department and institution choice form until after the score is known. This gives the candidate the opportunity to see what scores were used to admit students to various universities and departments in previous years and, hence, give him a more realistic account of his potential for acceptance into a program.

The main criticisms of the new examination modifications have been expressed in the press and by members of the educational community. The concerns are that too few high school graduates fully understand the new guidelines and that, when departments at colleges have significant input into determining who is admitted, there may be opportunity for favoritism.

Educators, government officials, and parents in Formosa agree that reform is needed in the JCEE; but the examination must remain in all ways above reproach in terms of fairness, openness, and integrity.

Acceptance at a good university or college brings joy to the student, honor to the family, and satisfaction to the high school from which the candidate graduated. Yet, interviews with numerous college students and graduates suggest that a sense of the anticlimactic sets in during the freshman year of college. High school had been grueling, and the arduous examination had placed most students in a high state of anxiety for six months to a full year. University life by comparison seemed to be quite easy and less than intellectually stimulating. The anticipation of college and the years of preparation brought about a certain idealization of higher education, which in the lives of most students is not realized by the universities that they attend. There is a certainty about success in college that is not present in high school. The statistics indicate that over 95 percent of those who are admitted graduate (unless health or profound family problems intervene). College now becomes a place to pass four years and to go through the motions of academic life; the real excitement and challenge for most young men and women was felt during their years in the Chinese high school in Taiwan.

28. TAIWAN'S HIGH SCHOOLS: A STATISTICAL ANALYSIS

Though statistics are seldom the most exciting part of a research project, they are important if one is to grasp all dimensions of the topic under discussion. This brief section will be devoted to statistical materials related to the high school in Taiwan. It is intended to shed light on the subject in a manner that narrative cannot do. Materials for this chapter were supplied (in Chinese) by the Ministry of Education and the Provincial Department of Education.

The current number of academic high schools in Taiwan today is 176. This includes all academic high schools on Taiwan proper and also those schools on the outer islets of Kinmen, Matsu, and Penghu. There are some 13,424 teachers employed at these high schools and 3,241 staff members. The number of classes that are operated within these 176 high schools is 3,910. The current high school studentry is approximately 191,000, and the graduating class in the spring of 1983 registered 54,370.

Below is a summary of the senior high schools by location for the 1983-84 academic year.

Senior High Schools in Taiwan, 1983-84

	No. of Schools	No. of Teachers	No. of Staffs	No. of Classes	No. of Students	No. of Graduates in 1983
Grand Total	176	13 424	3 241	3 910	190 214	54 370
Taiwan Area	174	13 351	3 219	3 882	189 046	54 043
Tapiei Muni.	23	2 521	511	893	46 032	14 249
Kaohsiung Muni.	9	881	228	298	14 639	4 451
Taiwan Prov.	142	9 949	2 480	2 691	128 375	35 343
Taipei County	21	1 203	323	266	12 987	3 614
Yilan County	4	266	67	103	5 138	1 484
Taoyuan County	9	703	163	187	9 434	2 425
Hsinchu County	2	126	34	41	2 155	486
Miaoli County	5	396	122	98	4 429	1 096
Taichung County	8	716	189	137	6 554	1 972
Changhwa County	8	570	130	167	7 446	2 109
Nantou County	4	302	81	57	2 525	664
Yunlin County	7	450	101	124	5 623	1 427
Chiayi County	4	243	79	25	1 109	423
Tainan County	13	812	194	199	9 221	2 332
Kaohsing County	5	341	94	114	5 164	1 439
Pingtung County	8	485	116	158	7 132	2 230
Taitung County	3	142	37	53	2 148	597
Hwalien County	5	323	85	78	3 306	972
Penghu County	1	76	18	23	1 086	311
Keelung City	3	270	62	100	4 341	1 270
Hsinchu City	7	480	112	133	6 380	1 722
Taichung City	6	705	141	221	11 771	3 021
Chiayi City	7	471	128	156	7 959	2 198
Tainan City	12	889	204	251	12 467	3 551
Kinmen & Matsu Area	2	73	22	28	1 168	327
Kinmen County	1	60	19	25	1 044	299
Lienchiang County	1	13	3	3	124	28

(EDUCATIONAL STATISTICS, Taiwan, 1984)

The studentry at the academic high school has made rapid growth over the last 35 years. In 1950, there were 18,866 senior academic high school students; by 1955 that number had reached 30,169; and by 1960 the number increased to 57,512. The largest increase came in the 1967-68 academic year when the high schools in Taiwan showed some 141,000 high school students. The student population continued to grow, and one finds in 1975 there were 185,000 academic high school students. The population of the high schools today is over 190,000 students.

The number of teachers has also increased significantly since 1970. In that year there were some 9,862 pedagogues at the high schools in Taiwan. By 1975 there were 11,305, and 1980 found 13,096. The teacher/student ratio is about 1 to 22 if all persons in the high schools who have teaching credentials are included in the count.

When a child graduates from an academic high school, his primary goal is to be accepted at a college or university in Taiwan. Admission to all of these institutions is by competitive examination under the auspices of the Ministry of Education. The number of graduates from academic high schools in 1983 was almost 55,000. It should be noted that 349,000 students graduated from the junior high schools; approximately 55,000 were admitted to the academic high schools in 1983. Students who graduated in 1982 or 1981, students who did not attend high school but chose to enter the military after high school training, students from abroad, and youngsters from non-academic vocational high schools and junior normal teachers colleges were also permitted to sit for the extremely competitive National Joint College Entrance Examination. In 1983, approximately 97,000 Chinese students sought admission into one of Taiwan's 105 public/private institutions of higher learning for day school education. (The first choice of most was a university or four-year

college day school.) Taiwan has numerous excellent evening college degree offerings also, and students who for financial reasons cannot attend the regular day session may opt for evening college. Many high school graduates who do not do well on the JCEE may quite often be accepted at an evening college.

In 1983, some 29,000 students were accepted into the regular B.A. day school programs that are available in Taiwan. This is about 27 percent of the number of students who sat for the entrance examination. Approximately 36,000 were accepted into a junior two- or three-year college or evening university or college program. The remaining 33,000 were not admitted into higher education and entered the job market, the military, or became homemakers. There currently are 395,200 students in some institution of higher education in Taiwan, most of whom have been graduated from an academic high school in Taiwan.

Incidentally, the total studentry of island China in 1983-84 was 4,800,000. Of these 3,900,000 were in public schools, and 942,000 were attending private institutions. With a population of 18,800,000, Taiwan has the second largest per capita school attendance (after the U.S.A.) in the world. The total number of schools (1984) was 5,738 and the total number of certified teachers and administrators was approximately 180,000 (while the number of staff was 30,400 and the total number of classes in the 1983-84 year was 109,000, inclusive). The general student population per 1,000 is 255.43, and the academic high school population per 1,000 is 10.12.

These statistics suggest that Taiwan has shown steady growth in affording educational opportunity to its young men and women. The system of education is often criticized for its competitiveness, yet the statistics do suggest that children who are able to make the commitment to educational excellence

have many opportunities for academic growth and achievement, and in an Oriental society like Taiwan this can normally be equated to economic and social success.

Discussion is currently underway to extend free public education to the twelfth grade. The emphasis would be on vocational training and education, while the number of students attending academic high schools and being admitted to colleges and universities would remain about the same. College presidents and personnel at the Ministry of Education point out how difficult and expensive this goal would be to reach, yet it is the next major priority of the education establishment in Formosa.

29. CASE STUDY: THE HIGH SCHOOL YEARS AS A WAY OF LIFE

To understand how the system of high school education works in Taiwan, let us follow a young woman through her program of study and academic preparation, grades 10 through 12.

This case study is based on interviews with six high school students and recent high school graduates, four interviews with parents, and numerous discussions with teachers and administrators. It is a composite sketch of what the high school experience is like for the typical student, yet there is probably no single pupil who has had a collection of experiences and activities in the educative system identical to the descriptions given here.*

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*The figures, statistics, and facts used in this study are true.

Our student's name is Lin, Mei-li, and she is the daughter of a typical middle-class family living in the suburbs of Taipei. Her father has a secure position with the civil service, and he received his B.A. degree in engineering from National Taiwan University. Mrs. Lin, the mother, works part-time as an accountant for a large bank in central Taipei. She received her education at a three-year junior college in the field of business and economics. Mei-li has a brother who, after graduating from Central University, is now serving his 21 months in Taiwan national domestic military as a second lieutenant and a younger sister who has just begun the sixth grade. The Lin family lives in a single dwelling home with a small yard and easy access to public transportation. Mr. Lin has his own car but, because of the traffic problems Taipei is famous for, prefers to use the public bus system to and from his 8:30 to 5:00 office hours. The Lin home has three bedrooms, a large living/den room, two baths, and a small yet well-appointed kitchen. Like most homes in Taiwan, it is air-conditioned, has a telephone, and a color television, but does not have central heating.

Because of the educational experiences of Mr. and Mrs. Lin and also the support of the grandparents who live quite close to the Lin home, the academic success of all of the Lin children is of great importance. To put it succinctly, the Lin family is willing to make any logical sacrifice for their children's academic success.

It is well understood in the Lin family that a correlation exists between the schools pupils attend and their opportunities for future success. Generally, families want their children to marry men or women who have a similar educational background. Prior to the advent of modern education, a person's social and economic status were looked at carefully by would-be in-laws. The traumatic experience that Taiwan underwent in the period 1895-1950 changed the distribution of wealth and prestige radically. The changes

that occurred caused education to be again elevated to its citadel of importance in the social and cultural realm; and parents today recognize that for their child to have good employment, to marry well, and to have the economic security to help all members of the family in bad times or when illness or aging occur, a superior education is desperately needed. These facts are discussed openly at the dinner table in the Lin family, and the grandparents' frequent visits only reinforce this supposition.

The Lin family speaks both Mandarin and Taiwanese. Mr. Lin is of Taiwanese ancestry; while his wife, who is his same age, left mainland China with her parents in 1949 as a young girl and is considered a "mainlander." Yet the distinctions between the two language groups have now been blurred, and the family's friends and the children's playmates and schoolmates are both of Taiwanese and mainland ancestry. Virtually all acquaintances speak both dialects and switch from one to the other depending on the situation or content of the conversation.

In Mei-li Lin's last year of junior high school, she feels for the first time the great pressures of the Taiwan educational system. Until then, Mei-li's life had been quite idyllic. Her homework was done and her performance in school was always excellent, but she still had plenty of time for games and recreation with the children in the neighborhood in which she lived.

In the ninth grade, life now becomes deadly serious for Mei-li. She feels the full responsibility of holding her family's name up by passing the entrance examination into a good high school in Taipei City. As the ninth-grade year continues, Mei-li is put under great internal and external pressure. The free time that she so enjoyed is now eaten up with study. Her parents have hired a graduate student at National Taiwan Normal University to come to the house each evening to tutor Mei-li on her weakest subject--mathematics. Mr. Lin has also made arrangements for Mei-li to enter

a nearby "cram school" staffed by moonlighting college professors. It is hoped by all the family that these advantages will give the 16-year-old Mei-li the chance to attend the most prestigious high school in all of Taiwan, "Taipei First Girls' Senior High School." This school has an excellent reputation, and almost 100 percent of its graduates, some 2,000 young women each year, are admitted to the better universities of Taiwan. In recent years, 40 percent have been accepted at National Taiwan University, the "Harvard" of Taiwan.

It should be noted that Taipei First Girls' Senior High School may be the finest public academic high school in the world. There are reasons for making this sweeping generalization:

1. Students apply from all over the island of Taiwan for admission to this high school.
2. All girl students from every area who hope to attend high school will put Taipei First Girls' Senior High School as their first choice.
3. Only the 2,000 very best of the 36,000 women candidates who have applied can be admitted to this school.
4. The school has the right to select students that round out its highly academic, cultural, and social programs.
5. The teachers in Taiwan all agree that the chance to teach at Taipei First Girls' Senior High School is the best position one could have. Hence, the staff there is excellent.
6. Because the school is considered one of the treasures of Taiwan, special monies are made available so that the students can travel abroad to perform and meet other students.
7. First Girls' has the largest number of graduates attend prestigious undergraduate and graduate universities in Taiwan and overseas of any school in the nation.
8. The peer pressure at the school is intense; learning is the major function of the institution, and applicants know this and accept the responsibility and also the entitlements.

9. Acceptance to this school is seen by parents as bringing great prestige to the family name and assuring their daughter of many opportunities for future success.

10. The children who attend First Girls' High School have been able to internalize the relationship between delayed gratification, future orientedness, and success in their society.

11. First Girls' High School is the oldest high school in Taiwan and, hence, has the greatest number of alumnae, many of whom are in positions of influence in Chinese society in Taiwan, America, and elsewhere.

Mei-li has long wanted to attend First Girls' High School. Though she is not fully aware of all of the advantages it will bring her, her parents have expressed their hope that she will be able to pass the national high school entrance examination and be admitted to this wonderful school.

During her last year in junior high school, Mei-li begins to take a series of practice tests to get her ready for the ordeal ahead. On the basis of these tests, her parents' encouragement, and her high grade point average, Mei-li is being prepared for the high school entrance examination. Most junior high school students have already chosen to pursue educational goals that do not require an academic high school preparation. About 70 percent of her classmates at the public junior high school that she attends chose to enter the vocational high school. There is little resentment between the academically inclined and the vocational bound.

As the warm spring months approach, Mei-li is becoming more conscious of the impending entrance examination. Her parents, who have met her teachers, have little or no input into the policies of her school, but they do give Mei-li constant support. Her household duties have been eliminated, and she may take her meals when and where she wants. Television time has all but been eliminated, and the house is kept as quiet as possible so that Mei-li may study whenever she desires.

Finally, the high school entrance examination is at hand. The day before this national test Mei-li visits the school where she will sit for the examination. The day of the test she gets up very early and her father drives her to the examination site. Mei-li shows her identification card with her picture on it and is given her seat. She has brought with her a pencil, pen, ruler, and eraser. All ninth graders who want to go on must apply for at least one high school and must take the same qualifying examination prepared by educators from various schools. The examination is given the same day and just once. Those who fail it must sit out a year and try again or go to one of the night schools associated with the regular academic high schools. Evening school does not have the prestige that day school affords. Some students who do poorly may try to be admitted to a private school, but this is quite expensive. Generally, private schools are inferior to the elite public schools, though some private preparatory schools are considered excellent.

Fortunately for the Lin family, Mei-li is well-prepared for the examination and does very well. Her forte is Chinese and English; her weakness, mathematics; but her overall score allows her to be admitted to Taipei First Girls' Senior High School. To celebrate this auspicious event, her parents and grandparents go to one of the exclusive western restaurants in Taipei, and Mei-li has a large steak dinner and ice cream. That evening the neighbors are invited in and bring gifts to reward Mei-li for her performance, and the party continues until late in the evening.

The remainder of the ninth grade year passes quickly, and the summer is spent hiking, participating in summer youth group activities, and enjoying being at home with friends, family, and peers. Her grandparents come to the house each day to prepare lunch for Mei-li and her little sister and usually remain until dinner time.

This period--between the successful completion of the junior high school and the high school entrance examination and admission in the autumn to Taipei First Girls' Senior High School--is one of the happiest of Mei-li's life.

Mei-li Lin and some 2,000 other girls have been accepted to the tenth grade of Taipei First Girls' Senior High School where they will attend classes for 240 days per year. Her parents, who did not have to pay for her education grades one through nine, now are required to contribute towards her tuition the sum of about US$50 per semester. They also must purchase her books and supply her with the uniform that identifies Mei-li as a student at First Girls'. Poor children receive government grants for these items.

Immediately prior to the school year, Mei-li and her mother visit the beauty shop, and Mei-li has her long hair cut so that it is now in a modified pageboy at the mid-ear length. Mei-li realizes that all of the other students in the high school system will have short hair so this does not bother her. Unlike many of her classmates Mei-li will be able to live at home and commute to school Monday through Saturday. The girls who have been accepted from locations distant from Taipei will be required to "board out" with relatives, friends, or at selected homes. This is a very common practice in Taiwan; the opportunity of attending a good public or private high school is seldom sacrificed due to lack of proximity to the institution.

On the first day of school Mei-li's father drives her to the front gate of the large red brick building complex--built in the 1920's by the Japanese--that is now Taipei First Girls' Senior High School. Usually she will take the city bus system, which is very safe and relatively efficient. On days she is late, her father will drive her or she will take a taxi to school. Taxicab prices in Taipei are relatively cheap, and many students will use them.

Her first day is a time of orientation. Principal Chang addresses all of the girls and they are assigned to their homeroom. As her homeroom teacher, Mei-li has Teacher Wang* (she will call him "Teacher" or "Sir"), a man who also is an instructor of science. She is told by Teacher Wang that he is to be respected, the students are to stand whenever a teacher, administrator, or guest enters the classroom, but he is also eager for them to talk with him about their concerns. Teacher Wang also tells the students about school policy, discipline, the point system for problems, dress, health, counseling services that are available at the school, and extracurricular activities. He makes a point to suggest that their behavior--in school and out--reflects on the class, the school, their parents, and Chinese civilization, and that they have been chosen to attend the finest school in China and must act accordingly. Teacher Wang also tells them that school begins at 7:45 a.m. for the flag raising and a lecture from one of the teachers or administrators. All students must attend this.

Mei-li is quite intimidated by Teacher Wang and the other aspects of the school; Teacher Wang is much more serious and determined than her junior high school pedagogues, whom she became quite fond of during her last year. At First Girls' High School, Mei-li hears that about half of the teachers have master's degrees and two have earned doctorates. Her parents emphasize to her regularly how fortunate she is to have been accepted at this excellent high school but that she should not look down upon her Chinese friends who are in vocational high schools. Mei-li cannot help but think that her parents

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*Most teachers at the academic secondary high schools in Taiwan have a BA/BS degree. About 10 percent have completed their master's, and at some of the better urban high schools a few high school faculty have earned doctorates (this is quite rare, however). National Taiwan Normal Univeristy, National Taiwan Teacher College of Taeching, and National Teacher University of Kaohsiung supply over 92 percent of the high school teachers in Formosa.

are proud of her and would be disappointed if she had been accepted at a vocational-technical high school rather than a good public or private academic high school.

All of the students at the high school are required to take the same curriculum but are given options in electives and extracurricular activities. The basic curriculum for tenth graders consists of the following classes: English, SAN MIN CHU-YI, Chinese, algebra, geography, music, calligraphy and painting, biology, military training or first aid, and physical education. For her extracurricular activity, Mei-li joins the harmonica club (which will perform all over the Orient on tours) and the home economics society. She also is accepted on the basketball team but does not believe she will have enough time to participate.

From the first day of school Mei-li has homework. She does this at home or on many occasions remains at the school until late in the evening to complete her assignments. Her parents review her work each night and affix their name, using the family chop, to the completed assignments. As a tenth grader Mei-li does three hours each night and on Sundays spends five hours in her studies. School meets on Saturday, but for only half a day. Saturday afternoons are the best times to be with friends and family, and she relishes these moments of freedom and social life.

Mei-li's main complaints about her education are that too much emphasis is placed on memorization and there is too little time for intellectual exploration. Also, she feels that already the focus of her learning is being directed to the Joint College Entrance Examination which she will take some three years hence.

The main aspects of the school experience that Mei-li likes are the strong friendships that she has been able to develop with her classmates.

Mei-li does not know it, but many of these friends will be a part of her whole life. Her favorite courses are English, Chinese, and music; Mei-li still has difficulties with mathematics, but she is able to compensate for this by doing extra homework and allowing some of the girls who are talented in math to help her after school.

As part of the process of education, each student at Taipei First Girls' Senior High School has certain required chores. Each day, Monday through Saturday, certain students must arrive early and sweep the rooms, clean the grounds, and wash the desks. At the conclusion of the day this process is repeated. The students have fun doing this; it also gives them a sense of identity with the school. These tasks are rotated through the whole studentry. Mei-li hears that one of her classmates has missed two turns in cleaning and that she has been given a one-point reprimand. A letter was also sent home concerning this problem. Nine points, the students are told, lead to expulsion--the most feared consequence that the school can offer. If one is expelled, she may not enter another academic high school; hence, she may not be an applicant to college.

On some days Mei-li feels she is in a pressure cooker. Her homework, classes, extracurricular activities and time constraints make life quite tense for this 17-year-old student who now is completing her tenth-grade year.

Admitted to the eleventh grade, Mei-li is assigned the following courses to study: Chinese, English, mathematics, foreign history, chemistry, music, art, home economics, SAN MIN CHU-YI, and military education. She may also take as an elective a second foreign language, girl scouts, and earth science.

The course she dislikes most is mandatory physical education, which she feels is a waste of time. Mei-li, like her friends, is able to contrive a

variety of excuses to stay out of this class, and her parents are on occasions willing to write notes for her requesting that she be allowed to miss her physical education classes. During these times, she goes to the library to study her academic subjects. All students must be accounted for at all times at the academic high school in Taiwan.

Perhaps the most creative part of Mei-li's education is the diary she keeps and turns in each week for a grade. Mr. Wang, her homeroom teacher, often makes notations in the diary. He states on occasion that "your writing skills are excellent and perhaps you should think about majoring in language when you go to college." Mei-li shows her parents this, and they tell the whole family of this delightful accolade. The diary is kept so that the students may keep track of their thoughts, their problems, and their successes. It is graded on clarity, calligraphy, and grammar and is seen by Chinese educators as creating a disciplined mind.

It is during her senior year in high school that Mei-li begins to understand the full implication of her years of academic preparation, because it is now that the focus of her efforts are directed to passing the Joint College Entrance Examination. The teachers are quite honest. They state that the reason the students are here and the rationale for the teaching methods are to prepare them for successfully passing the college entrance examination.

Though Mei-li is required to take a full complement of courses that are similar to the classes of previous years, she now finds that most of her time is spent in preparation for the JCEE, which will be given during the summer after her senior year--some eight months away.

Her parents realize the importance of this event and make every effort to help her. She has no household duties, and her meals await her arrival. Mr. Lin arranges for Mei-li to attend the best "cram school" in Taipei four

nights per week for four hours per night. At this school she is given numerous trial tests and prepared further in her academic subjects. Both at Taipei First Girls' High School and at the "cram school" Mei-li is given examinations similar to the JCEE (short answer, multiple choice, and fill-in-the-blank type questions).

As the time arrives for her high school year to end, Mei-li, like all of her classmates, thinks less about high school life and social activities and more about the JCEE. The graduation ceremony at Taipei First Girls' High School is rather small. Parents come and music is played. Mei-li has graduated in the top 25 percent of her class and she has an A average (93 percent). Yet with the advent of the examination some six weeks away, she can feel little of the joy that she anticipated at receiving her diploma from the best high school in the Orient.

The last few weeks prior to the examination are filled with hours of study, little sleep, and great fear of failing the JCEE. Her hope is to be accepted at National Taiwan University (as her father had been) in the area of languages. Finally, the big day comes. For six years Mei-li and her parents and friends have supported her in her quest to go to a good university. Now that the examination is at hand, Mei-li feels the full pressure of the Chinese education system in Taiwan. A few days before the examination she develops the flu and is tired and weakened.

Mei-li arrives at the examination site to which she has been assigned at 6:30 a.m., shows her student identification card which contains a recent photograph of her, and signs the necessary registration forms. On this day throughout Taiwan, some 98,000 students are going through the same procedures. Mei-li registered for the examination early in the summer; but, because of the new examination system that was instigated in 1984, she did not at that

time have to list her choice of colleges and academic fields of study. She has applied to take the examination in the fields of humanities and social sciences, particularly in the area of language development; and her tests consist of questions from the fields of mathematics, literature, Chinese, history, language, SAN MIN CHU-YI, and sciences. Because of her choice in majors, she is tested most heavily in the arts, social sciences, and humanities. After the two-day examination has been graded, Mei-li will receive her score and at that time she can select, based on her score, the university and department she hopes to attend.

All students are observed carefully during the national examination to prevent cheating. Mei-li does notice that one boy has brought notes with him, but this is not seen by the teacher and she chooses to say nothing.

At the end of the two-day ordeal, Mei-li is exhausted. She spends a week at home, tired and at the same time anxious about her score on the examination.

In two weeks the letter from the Ministry of Education arrives and tells Mei-li the results of the examination and her six years of diligent study. She has received a cumulative JCEE average of 465. The cut off score for admission to National Taiwan University for foreign languages and literature is 455. Mei-li knows that she can be accepted at National Taiwan University, her first choice and her father's alma mater. Immediately after receiving her examination score, she makes final application through the M.O.E. for a place in the language department of National Taiwan University. She also lists her second and third choices of subject areas and universities.

Mei-li's closest friend does less well and, rather than accept a place at an inferior university, this girl spends a year at a cram school where she studies old examination questions and reviews all her subjects. The

teachers regularly drill her and also give her strenuous tests to prepare her for the JCEE. She will have to wait one full year to sit for this test a second time. Statistically, this girl's chances of passing the examination the second time are enhanced if she does use the support agencies available in Taiwan.

Mei-li Lin's acceptance at National Taiwan University is treated with great enthusiasm and happiness by the whole Lin family, who know that their daughter's efforts over the past six years have been worthwhile. The family honor is enhanced, and the opportunities that Mei-li has for a richer and more fulfilling life are elevated.

Her life as a student at National Taiwan University is not exactly what Mei-li had anticipated. There is little of the discipline found in the high school. Students dress more freely and wear their hair longer. University life is also less academically rewarding than Mei-li had hoped it would be. She has homework, but it is much less than in high school. Her teachers use the lecture method, and the fantasies that she had had about the intellectual stimulation associated with college life (which were a product of her arduous years of preparation for admission) are not realized. Close friendships are made and dating is encouraged, but the idealism that Mei-li had developed as a high school student is not to be found.

30. CRITICISMS AND CONCERNS, APPRAISAL AND ASSESSMENT

It is the intention of this last chapter to reveal some of the problems, difficulties, and concerns that Taiwan faces in its efforts to bring about educational excellence at the academic senior high school level.

When one talks about "problems" in the context of the high school's educative process now found in Taiwan, it is first necessary to define how this term is being used and, secondly, to give the rationale for an American who has not lived in Taiwan as a citizen of that society and who has never attended the school system of Taiwan to address these issues.

American education today is replete with problems. Many of these are also found in Western Europe and, to a lesser degree, in Japan. They are profound and go directly to the core of the educative process. Violence, intellectual apathy, disrespect towards school authorities, vandalism, parental antagonism, teaching dysfunctionality, administrative waste, technological faddism, truancy, a lack of future orientedness on the part of students, drug and alcohol abuse, physical threats toward teachers, and a general disillusionment by the public toward public education--particularly at the high school level--are some of the problems that now face American education (Ignas, 1981, pp. 26-28).

Issues like the ones cited above are absent from the schools of Taiwan. Hence, when we use the word "problems" to discuss issues that are of concern to high school administrators and pedagogues in Formosa, it must be made clear that the general sense of alienation and despair that is felt by those who seek to understand the current education paragon in the United States is quite different from what is found in the Chinese experience in Taiwan.

Is it possible for an American educational researcher to evaluate objectively another nation's education system? Perhaps! Yet, because of

the intellectual and emotional "baggage" brought with the researcher in attempting to do objective field-based research, the best one generally can hope for is an honest appraisal and assessment of another nation's education system. The educational institution cannot be studied using the scientific methods of controlled variables and replicability of facts in disparate settings; it is too complex, human-intensive, and subjective. Social scientists and educationalists who attempt to develop "scientific models" for understanding a subject as elusive and multidimensional as pedagogics or academeology in a foreign setting are seldom able to reach valid conclusions and will, in their findings, often misrepresent the subject that they have sought to describe and analyze.

Chinese scholars in Taiwan have sought to bring to the attention of the public and the educational authorities the difficulties that are faced by the concept of the academic Chinese high school. In discussions with this writer, teachers, administrators, parents, and students expressed their concerns with the high school educational system. It is from the literature available and the discussions held while in Taiwan in the fall of 1982 and again in 1984 that this chapter is based.

A leading expert on the high school in Taiwan is Professor Chyu, Li-ho. Professor Chyu is currently senior professor of education at National Taiwan Normal University in Taipei, and until quite recently he was chairman of the department of education at NTNU. Professor Chyu is also one of Taiwan's most prolific writers in the field of secondary education.

In 1977 Professor Chyu prepared a lengthy and scholarly article for the BULLETIN OF NATIONAL INSTITUTES OF EDUCATIONAL MATERIALS. The focus of

this excellent article was on the training of high school teachers in Taiwan. Professor Chyu, however, addresses a larger topic--basically, the problems associated with high school education in modern Taiwan and how those difficulties are related to teacher education (Smith, 1984, pp. 115-135).

It is the contention of Senior Professor Chyu that there are indeed incidents of unpleasantness which can, on rare occasions, be found in the high schools of Taiwan. Though Professor Chyu does not mention this in his article, I believe he uses the term high school generically--all institutions (academic, vocational, technical, rural, urban, island) which offer educational experiences in grades 10-12. To quote Professor Chyu, Li-ho:

> Incidents such as classroom violence and "bloodshed on campus" that happened recently in high schools [academic or vocational?] according to newspaper and television reports are the following: corporal punishment by teachers, student violence towards teachers, brutality among classmates, and outside rascals' violence toward high school students.

Though these incidents are very rare and are usually related to schools without academic prestige, they do occur in the Taiwan experience. Professor Chyu suggests that these incidents are closely related to the type of training school teachers receive when at normal colleges or universities (Chyu Report, 1977, p. 1).

Most of the other materials read and information garnered from numerous interviews have not emphasized the isolated violence that does, at times, crop up at the high school level on Taiwan.

Perhaps the strongest critique which this writer has read concerning Chinese education in Taiwan was written by Dr. Arnold Sprenger, Dean of the College of Foreign Languages at Fu Jen Catholic University, Taipei. Dr. Sprenger, a distinguished scholar, has spent most of his adult life in the Orient. This has done two things for Father Sprenger--it has allowed him to become an authority on education in Taiwan, particularly from the vantage

point of a senior scholar raised and educated in the liberal arts tradition, and it has isolated Dr. Sprenger from the great problems that are being faced by Western societies, particularly the United States, in educating their young.

Because of the insightful and cosmic nature of Dean Sprenger's critique on education--particularly secondary schools--in Taiwan, his article is quoted in full:

Deficiencies in the Intellectual Training of Students (by Arnold Sprenger)

"One of the major shortcomings of Taiwan's present system of education is the method of intellectual training. "The teacher talks and the students listen." This basic approach to teaching methodology permeates our whole system of education depriving our students of challenges so urgently needed for their intellectual growth and future work in society.

"Surprisingly, reading is a basic problem. Students often find it difficult to answer questions and even more difficult to ask questions. The more demanding the materials taught, the less students are inclined to make any kind of statement. Students who prepare reading assignments for class are often unable to effectively or competently discuss the assignments in class. Students are uncertain about whether they really understand the materials read. Under the present educational system they have no way of judging their own reading competence. Students who have gone through the local educational system have simply not been introduced to the concept of critical and independent reading.

"In mastering this crucial skill our students are left completely on their own. Reading skills, integral to the process of gaining a detailed and full understanding of our world and times, are not systematically taught. Students are almost never instructed in methods of

critical analysis--grammatical, logical and semantic analysis. Strategies for judging and discussing texts, how to make the best use of them, in short, how to translate experience and knowledge of other human beings contained in abstract written texts into their own realm of understanding,knowledge and decision-making, are left to the individual student.

"We feel that there can be no scientific breakthroughs or educational progress in this country, on a large scale, until this problem is dealt with and fully understood. Our libraries hold the treasures of the modern world's sciences and technology. It's all readily available to our young people. Why is so little use made of these resources, why do students so seldom use our libraries and why must one study abroad to become an established scholar? The answer is clear; our schools and universities do not sufficiently introduce students to systematic, independent and critical reading.

"At present our students' writing ability is very low. While the basic importance of writing skills are stressed in our educational system, few teachers, if any, take the trouble to make writing assignments or to oversee the writing progress of individual students. Writing is a reflection of the thought process and the work in our classrooms has done little to promote students' intellectual progress. Our students are simply not guided in effective methods of thinking, visualizing problems clearly, logical organization of their thoughts, and verbal expression in a coherent and objective manner. Many students find their intellectual inadequacy a shocking and painful discovery.

"The significance of reading, verbal and writing skills, the basic tools of all human activities in the world outside as well as inside

academia, has been dangerously neglected by our schools and universities. Such skills are interrelated and intimately connected with the activities of the human mind. They determine, to a large extent, the direction, depth of comprehension and clarity of understanding of our students. To pay little or no attention to such basic academic-vocational skills is to neglect the most important aspect of the intellectual development of our young people.

Inadequacies in Development of Community Spirit and Social Awareness Among Students

"Mass communication and the storing and transfer of information by electronic means has transformed modern society. However, its effect upon our system of education and how it will affect the future of education is not yet clear. Despite the many promises for improving education in a computer age, the use of audio-visual devices and electronics have, so far, had only a limited impact on the development of our educational system, or the intellectual potential of our students. While facts may be much more readily available, the recent revolution in high technology has actually had little effect on the development of the individual student's mind. Modern electronics have done even less in helping to tear down the walls of isolation threatening the sound psychological and social growth of our students.

"Through their years in grade school and even into college, students in Taiwan are herded in groups of 40 to 60 students or in some cases even larger classes. This is a poor learning environment. In many, if not most cases, information flows along a one-way street: from teacher to student. There is little student feedback and practically no intercommunication among the students in the classroom setting. This may explain the seemingly strange behavior of so many students. Academic

matters are rarely discussed outside of class. If students are requested to work together on a project, it is often difficult to reach any general agreement. Many relevant or meaningful experiments may be planned, but few are effectively carried out. Cooperation is difficult to achieve. Subjectivism and egoism seem unavoidable, and, at times, factionalism threatens to block the possibility of any meaningful classroom work.

"When one considers that these students have spent more than 10 years in such deficient classroom situations, it is hardly surprising that their educational experience may be destructive. The natural tendency of young people to observe, to watch, to act out, to learn from one another and to express one's feelings and ideas is almost completely blocked in our schools. Day after day, for years at a time, students listen to teachers who use dry, abstract textbooks. They can only prepare nervously for the dreaded examinations which determine careers. How could there be interest in anything but preparation for the examinations. Examinations are, after all, the final arbiter, the only thing that counts. Tough competition and merciless social pressure force the individual student to work scrupulously for high marks. This devotion to grades prevents the individual from any meaningful interaction with other students. Subsequently, a student may become indifferent to social values and often finds himself pitted in direct competition with his classmates.

"If we visualize schools as a place where the student learns to interact effectively with others, learns respect for others and prepares himself for life in our complex modern society, then we simply cannot claim that our system of education is succeeding in meeting the challenge. Our schools often serve only to further isolate young people not only

from each other through competition, but also from the society in general. The result is too often deepening alienation, feelings of helplessness, social indifference, intellectual and psychological instability, irrational behavior and egoism. In general, we cannot blame the students for their maladjustment. Society as a whole has to share in the blame and at the same time take responsibility for removing the causes of this social sickness as soon as possible.

Neglect of Ethical Values

"If our young people are to become productive and healthy members of society they must be helped to understand the world in which we live. They must understand that a man becomes a mature human being only in a community of joint responsibility. We must inculcate our young people with an appreciation of ethical values such as self-respect, selflessness, friendship, love, honesty, faith in others, and in the common good. These values are the most difficult to acquire, yet they will be decisive for prudent and mature judgments and decision-making in the future.

"Again, how much of all this is practiced in our schools? Do students experience these values on a daily basis? If not, how can they possibly become responsible members of society? Why are we shocked by the annual increase of crimes committed by our teenagers? Common sense tells us that these young people, who for years live under the pressures of the deadening examination and school system, are searching for ways and means outside of the establishment to let society know that they exist. Unless our schools become places where our youth can meet with respect, where they can experience understanding and love, where they can discover themselves and the happiness of communal responsibility,

in short, if our schools do not become institutions which can live up to the hopes and aspirations of our youth, there is little hope for the future.

The Cancerous Joint College Entrance Examination

"If one were to look for a focal point of our present educational system's problems, it could easily be the joint college entrance examination. This standard examination must be reviewed and studied by every government official and private citizen seriously concerned with the future of education in the Republic of China. It is, in my opinion, with this standardized examination that any serious and, hopefully, effective educational reform must begin.

"Everyone in this country realizes that the standard college entrance exam is the most decisive event in the life of Chinese students. As early as grade school, families must begin preparation of their children for the series of exams which will culminate in this college entrance examination. In the minds of parents, teachers, principals and, consequently, students, this examination is the only thing that counts in the long run. All efforts are concentrated on this one goal. Unfortunately, many other important aspects of education are often discarded. If our educational system is turned into an abstract system with only so-called objective tests as the goal, then the result will be schools in which all teaching and learning will be geared toward these abstract, non-educational goals.

"Students who fail in the joint college entrance examination--always in the majority--are automatically characterized as second class citizens. What have they learned up to that point, and, how are they to establish

themselves in society? It may be extremely informative to study possible connections between the rising crime rate among our young people, general unrest among our youth and failure in the examination system. Is crime the result of despair from failure in the educational system? Even for those privileged students who pass the examinations, academic life may still hold many painful and disillusioning experiences.

"The joint college entrance examination also fosters a psychological and social maladjustment through its pitting of student against student, teacher against teacher and school against school. Students and even teachers and parents can be blinded to the erosion of their social and moral ethics. The loss of true educational goals is often accompanied by anti-social feelings, selfishness and deepening isolation or alienation of students. A realistic assessment of the harmful physical and psychological effects of the examination system on young people is shocking. A sound Chinese society based on the intellectual development and growth of its youth can hardly be realized without the removal of such a cancerous growth poisoning the present educational system" (Sprenger, THE ECONOMIC NEWS, October 11-17, 1982).

Dr. Arnold Sprenger's critical assessment is an important statement of the difficulties that <u>all</u> Oriental educational systems face. Yet the eloquence of his article does tend to obfuscate an important reality: While the students in Taiwan may indeed have problems in creativity and self-expression, the anarchy and learning dysfunctionality that pervades American public education, grades 10-12, is a much more "cancerous growth poisoning the present educational system" than the concerns that Dean Sprenger identifies as being problematic to Taiwan children's learning and the educational system.

The students in Taiwan with whom this writer talked also were quick to point to a variety of problems associated with their education. In numerous conversations, students indicated that the pressure placed on them to be successful and to excel in the educative process is excessive. Not only do schools create a competitive atmosphere in which the emphasis is always on conformity to regulations and preparing for examinations, but parents who want their offspring to be successful also place great pressure on their children.

Families want their children to go to a university or college, and the only way to accomplish that goal is to study and achieve academically. Chinese mothers and fathers are quick to suggest that failure on the part of their children makes them "lose face" to relatives and friends. This great pressure to succeed has created varying degrees of psychological distress in many of the children who are trying to compete for admission to an academic high school or university.

Students point out that they are not able to enjoy the cavalier social life that naturally accompanies the teenage years. School work and cram sessions will quite often preclude this. There is also a feeling that too much information is being given to children and that much of it is irrelevant and that its main function is to keep the students busy. Memorization and imitation are two features of the high school system of Taiwan that senior level students most resent. As one young woman at Taipei Wesley Girls' School stated, "I have learned from my teachers and my textbooks for twelve years, yet I do not believe I know how to think for myself." Even in the teaching of foreign language, the emphasis is placed on grammar and spelling; only the best students learn how to speak in a second or third foreign language (though all can read English). One professor indicated that the reason for the tendency of Chinese education to emphasize conformity and memorization

was the nature of the Chinese language, which, because it is based on ideographic characters that must be memorized (some 40-50 thousand) and which are learned from age three onward, promoted in all areas of life a sense of the need for conformity and memorization.

Perhaps the strongest complaint voiced by students about their education was reserved for the high school and university entrance examination system. Too much emphasis, the students of Taiwan believe, is placed on the one test to get into high school and the one and only test to be accepted at a university. These examinations, which are so important in the young person's life, dominate their thoughts and the concerns of their parents.

Yet the students, educators, and parents spoken with agree that the examination system is fair. With 100,000 students eager to enter a university each year and with 28,000 openings available, no one appears to have a more objective and fair model for dealing with this problem.

Another issue addressed was related to social class. Poor families must make greater sacrificies to send their children to high school. Tuition must be paid and, while the child is in school, he cannot also be earning a salary. The education authorities indicate that every effort is being made to assist poorer children and that many of them do attend academic high schools and eventuate to college and universities. Yet one suspects that, even in a society that has an open and competitive educational system based on fair entrance examinations, children from wealthier backgrounds, where education is both an affordable and prized commodity, will have a far better chance to succeed at the high school level.

During each visit to Taiwan, this writer arranges to meet with Mr. Y. Y. Bao, President of the National Institute of the Arts in Taipei City. President Bao formerly was director of international education and cultural programs at the Ministry of Education.

Though President Bao is not directly related to the field of public school education, he is an articulate and deeply intellectual academician who, with a jeweler's eye, observes education in his society and in the world. Lengthy conversations with President Bao, 1977-1984, helped this writer learn a great deal about the strengths and weaknesses of Chinese education in Taiwan.

President Bao suggests that the strength of Chinese education as found in Taiwan is its emphasis on the utilitarian relationships that must exist in the Chinese family and society and how these influence the young to retain the family honor. Rapid social change has dominated Taiwan over the last 40 years, and education is the only vehicle that can prevent change from becoming disastrous. Yet, because of social and economic changes, the nature of the Chinese family is undergoing a major redefinition. Traditionally, according to President Bao, a Chinese scholar's life should exemplify a number of characteristics: (1) contribute to the public good, (2) live a life of moral ideals and set examples for others, and (3) leave something in written form for future generations.

Yet today in Taiwan, with the rapid economic and social development of that society and the relatively large population, a variety of problems has beset the academic high school. President Bao points to the great competition that exists among students to be accepted into an academic setting. He suggests that this competitiveness is moving the teaching/learning process away from education and directing it towards competitiveness. As a result, the

school uses the assembly line approach to meet a specific goal--the passing of the examination--and thus overemphasis on the use of the test as the sole criteria for advancement brings about a necessary neglect to liberal education. President Bao indicates his fear that the excellent training the young receive in Taiwan may also crush creativity and initiative. "If a student is able to succeed and reach age 25 without major problems in his education, he will surely be successful."

President Bao indicates that the best ways to deal with the problems facing Chinese education in Taiwan are twofold: (1) A greater emphasis must be placed on research into teaching, learning, and educational psychology, and (2) educators must inspire their students to be self-learners and seekers of knowledge.

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In the aforestated problems associated with Chinese education in Taiwan Chinese scholars, students, teachers, and intellectuals spoke and wrote openly about their concerns. As researchers look to the future, it can be hoped that the growth and development of secondary education in Taiwan will continue to progress in the orderly fashion described in the preceding pages. Given the great value the Chinese place on the educative system as a conduit to success and personal well-being, the society's commitment to educational openness and opportunity, and the existence of highly motivated students, dedicated teachers and administrators and supportive parents, it may be stated

with some assuredness that in future developments of Taiwan's educational paragon the effort will be made to create improved examination techniques and expanded educational opportunities, while at the same time retaining, reverentially, the time-honored Chinese and Confucian traditions, values, and ideals.

Taiwan's academic secondary education system will continue to reflect the social environment and historical evolution of that society. The extent of the responsiveness of an educational paradigm to social and individual needs and demands has an impact on its successes and failures. Taiwan's tertiary public academic education system, like educational systems of many other societies, tends to lag behind the rapidly changing social and economic environmental developments. Nevertheless, in perspective, the secondary academic model has attempted to adjust itself to its environment. It is clear to the researcher that the political and educational leadership in Taiwan is committed to providing the highest quality of education, while at the same time expanding education at all levels to meet the needs of a growing and industrializing society.

Given the past and protracted experience of China in educational matters and anticipating no major international or economic tragedies, the future of education for the young people of Taiwan should be encouraging.

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